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## **Men's Beauty is the New Black: The Comparing Study of Male Grooming Products Customer Behavior between Thai and Taiwanese Male**

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### **Abstract**

*The rapid growth of demand in male grooming industry in these recent years can reflect that the perception of men towards beauty product has been shifted. This research is not only providing the significant factors that have influence on men when coming to the decision-making process but also comparing their attitude towards male grooming product between Taiwanese and Thai male. This research was conducted by survey distribution to 323 Thai and 324 Taiwanese male customers and all of the hypotheses were examined by using LISREL8.8 with covariance Matrix. The result indicated that the main factors that had an influence on male grooming products consumption among Thai male were metrosexual and Sales Promotion while physical Attractiveness, Metrosexual, Advertisement and Sales Promotion played the big role among Taiwanese male.*

**Keywords:** Male grooming products, Men's care products, Cosmetics, Physical Attractiveness, Self-image, Metrosexual.

## 1. INTRODUCTION

### 1.1 Research background

As the definition of Cosmetics which derived from Cambridge Dictionary is the substances that people would apply on their face and body with the intention to enhance appearance. And, it seems not to be restricted as feminine product as it was in the past since the report from the Euromonitor(2016) shows the rapid growth of demand in male grooming industry have recently earned 2.4 billion dollars in 2016 and projected to reach the peak at 60.7 billion dollars in 2020. Likewise, emerging of the word “Metrosexual” which whether came from the influence of advertisement or not is presenting that, nowadays, men tend to aware more of how they look.

The perception of grooming products among men has also shifted from the things that help keep them sanitized to the product that they use to better their skin, enhance well-being and also maintain their youth. With the rising number of male grooming products users in recent decades, male grooming products has been diversified into many variety types of product including skin and hair care, toiletry, fragrant, and even make-up products. According to data stated by L’Oreal UK, Male grooming market was twice the rate of growing number in female’s cosmetics industry which were literally came from changing of men’s beauty perception and the consuming behavior. Each category is even classified more into abundant formulations based on different skin types and skin tones in order to help men choose the right product that suit best to their skin and concern. With the widespread success of cosmetics among male, many companies try to differentiate themselves by providing the male-specific products separately from the original female cosmetic products in order to serve more what men need.

#### 1.1.1 Male beauty industry in Asia

Even though western men, who had initially applied male cosmetics, has played the big role in male cosmetics industry for ages, the future target user of men’s care products are likely to shed some light on Asian men since the tremendously increase in number of skincare users among Asian men over the past few years leading by Japan and South Korea. Japanese and Korean singers, the so-called J-POP and K-POP, have a huge impacted on Asian market in terms of fashion and style. The repeated presentation of their look on media also served the new beauty symbolic and brought people up with the new beauty stereotype. With the influence of this phenomenon, men tended to concern more about how to obtain smoother and lighter skin. It also had an effect on increasing number of cosmetic surgery demand among Asian men to reach the ideal beauty standard especially people who lives in the urban area. Korean and Japanese these days are not consuming only fundamental products like cleanser and moisturizer, but some of them are more likely to add more complicated steps like sheet mask and foundation in their grooming routine so as to get the perfect skin. As the influence from artists and celebrities on media and culture belief, men have started to think that good appearance could help them gain many more opportunities in their career and their future lifetime. As a result, male consuming products industry, nowadays, are continuously growing and in many Asian countries like China, India, Thailand, Vietnam and Taiwan are seen to become the massive opportunity for male glooming market in the upcoming future (*Kanta, 2014*).

#### 1.1.2 Arising of Male Beauty Industry in Thailand

Apart from South Korea, one of the largest men’s skin care market in the world, Thai market are also constantly blooming and the growth rate of Thai market in these current years was expended twofold each year by surprisingly listed as the greatest sales value of the male cosmetic products in 2015 by *Published by Asian Society of Business and Commerce Research*

reaching Thai 3.7 million baht (Euromonitor, 2016). So far as Thailand has been foreseen to become one of the essential markets, the competition between existing beauty company in Thailand both nationwide and regional commercial business - for instance Beiersdorf and L'Oréal - and various newcomers has become intense. The report also showed that emerging of relevant participants in Thai men's care society such as male bloggers could be the epic learning source for Thai men to learn how to apply skin care and dare to try on color cosmetic products in some special occasion as well. Rolling out of specific-gender product is not only expected to drag the attention from existing customer in the market but also forecasted to gain interest from new potential customers to become more open mind trying new men's care product including boosting them to use color make-up in everyday as well.

### 1.1.3 Men's care in Taiwan

The progress of male beauty industry in Taiwan is also reflected by bursting of the specific-men care brands that had entered into Taiwanese market in numerous channels. Another indicator why Taiwanese men is realized to be one of the prospect target for Asian beauty industry is that they are one of the most listed countries who open to try great variety of men's care product including color cosmetic like BB cream and foundation (Kantar, 2014). The report also showed that the top concern among Taiwanese men is acne which literally conformed to one of the Taiwanese interviewee who gave the information about his own daily skin regime that he mainly focuses on consuming the oil-control products. Likewise, the report additionally detailed that to obtain the desire body figure and appearance, Taiwanese men are also put the emphasis on building muscle in the gym and taking dietary supplements in their routine.

### 1.2 Research purpose and objective

As the booming of global male cosmetics industry, abundant researchers have already studied on the male grooming products. Various studies also showed the different perceptions towards beauty product consumption between men and women. But less of them provided the comparative study about the attitude towards male grooming products and consumer behavior between Taiwanese and Thai male.

In this research, we are going to identify what are those significant factors that make men concerned about their appearance and finally decided to purchase those products. In this research, we conducted our experiment by studying on both internal factors (Physical attractiveness and self-image) and external factors (culture differences, media and financial factors). Throughout our testing, we conducted all the process by gathering information from our participants with unrelated educational backgrounds, ages and countries in order to reflect the utmost precise outcome for beauty industry. This current study will also help us to understand more about consumer shopping behavior and show what extent circumstances that could motivate the impulse buying behavior in cosmetics marketing activities as we are living in the information age.

### 1.3 Research structure

To evaluate male grooming product customer consumption behavior among Thai and Taiwanese men as expected framework, the study would first start with collecting data by using survey technique through classroom distribution and online survey.

All of the collected data would be analyzed by LISREL version 8.8 and STATISTICA version 10 to evaluate what factor that have a massive impact on men's perception on male grooming product consumption and to what factor they take into their consideration and lead to the final decision of those

products. According to the multi-variety of data collection in terms of nation, age and education background, descriptive Statistics will be implemented in this study as well.

The research will first start by introducing the definition of cosmetics, the background, current and future trend of men's beauty. Objective and purpose of the study are also mentioned in the first chapter.

The second chapter presents the literature review of prior researchers who also discussed about Physical Attractiveness, Product Packaging, Self-image, Masculinity, Media, Metrosexual, Advertisement, Economic factors, and Sales Promotion and Male Grooming Products which are main variables in this study.

Sampling design process and methodology that will be used in this research are presented in Chapter 3. Followed by Questionnaire development, Survey Participant Selection, and Data Analysis tools that will be used for evaluate the expected model.

Chapter four shows the Analysis and Results of the study and finally, the summary and discussion, Research Limitations. For the suggestion of future research would be discussed in the last chapter.

## 2. LITERATURE REVIEW

### 2.1 *Psychological influences*

#### 2.1.1 Physical attractiveness

After becoming an adolescent, one's attitude toward the opposite sex in terms of both physical and mental perspectives changes. Boys and girls spend lots of time improving their self-image, changing clothing styles, starting to wear cosmetics and being concerned about their figures or muscles to impress and attract the opposite sex (Pathan, 2011). It is widely accepted that those with a good-looking appearance are more confident than others because they tend to be well-treated and better-liked (Reis et al., 1982). The results of Dion & Berscheid (1972) suggest that physically attractive people are more socially desirable than less attractive ones. Besides, it is not just females who have heightened awareness about being overweight—according to the influence from Western Culture—and the preference for a muscular body. Their study showed that 95% of male college students are dissatisfied with their imperfect bodies (Danial & Bridges, 2013). Hence, the first hypothesis is

H1: Physical attractiveness positively affects the consumption of male grooming products

#### 2.1.2 Self-image

Self-image is how people value and define themselves, which may generally reflect their own self-esteem and confidence. According to the study, Men and Women's feelings about their weight and appearance play a major role in how satisfied they are with their overall lives (Frederick, 2016). Moreover, men more gradually start to become concerned about their appearance. Even though there are a number of studies showing that high self-esteem does not guarantee success (Baumeister, Campbell, Krueger, & Voh, 2003), people believe that high self-esteem can still generate many positive outcomes. Along with the effects of rapid urbanization, men nowadays are not only focused on good-looking clothing, but also male grooming products: hair products, skin care categories goods, have both become

alternative choices that play a significant role among the younger generation to boost confidence and retain one's youthful appearance.

However, the categories within the male grooming product line are still scant. One interviewee mentioned that he generally avoided using any female skin care products for two reasons. First, he expected that a truly effective product would provide a special formula that suited a man's skin. Second, he felt uncomfortable consuming a female-oriented product since he was afraid of being misidentified as being a homosexual. Product packaging relates to how consumers place a product's value in their mind (Ampuero & Vila, 2016). Men purchase products that correspond to their desired identity and self-image (Fiona & Elke, 1998). The reason male grooming products exist is to offer choices for men and avoid unwanted social repercussions from using cosmetics, which are mainly targeted at female consumers. Consequently, when comes the product and brand decision-making processes, men always choose products that reflect their lifestyle and self-image. Accordingly, the following hypotheses are generated:

H2: Product packaging has positive effect on self-image

H3: Self-image has positive effect on consumption of male grooming products

## 2.2 Social influences

### 2.2.1 Masculinity

According to the well-known proverb "beauty is in the eye of the beholder," the subjective definition of beauty and attractiveness are always based on general perceptions and judgments of people in society, which always differs according to place and time (Hatfield & Sprecher, 1986:4). With supporting ideas from BuzzFeed, men's standards of beauty are shown differently around the world. For instance, a beautiful men (from a Brazilian perspective) is one who is called "Macho," representing (according to the Oxford English Dictionary) a man who is aggressively proud of his masculinity. While in South Korea, beautiful men are a combination of muscular bodies, tall frames, with soft features and stylish clothing—as is obviously represented by "ideal" actors and singers (K-POP). Prior studies show that cultural allegiance in each nation has an influence on consumer behavior (Jaishankar, 1998). Cultural rituals influence cosmetics selection (Hemapatil & Bakkappa, 2012). Thus, a fourth hypothesis is forged:

H4: Masculinity influences the consumption of male grooming products

### 2.2.2. Media

The media exposure afforded to the ideal male body, which is defined as lean and muscular, can affect body dissatisfaction and depression (Agliata, 2004). Men attain their idea of masculinity through socialization (Tuncay, 2004). Another influence on physical appearance ideals appears to be reproduced from media denoted as metrosexual. Merriam-Webster defines the term "metrosexual" as an urban heterosexual male that is given to enhancing his personal appearance by fastidious grooming, beauty treatments, and fashionable clothes. Nowadays, there is a wider range of beauty product choices for men—apart from razors and deodorant. Since the emergence of metrosexuality, such products have proliferated.

Thus, the traditional beliefs regarding cosmetics and beauty products being limited to women are gradually disappearing. Metrosexuals who are concerned about their self-image intend to consume male grooming products (Cheng, Ooi & Ting, 2010). However, some studies have argued that because cosmetics are sensitive products, advertisements can only attract people's awareness but cannot create the consumer perceptions that normally are directly related to a consumer's decision-making process when

evaluating a particular cosmetic product. The perceptions people have are generally generated from their own experiences, along with recommendations from their peers, friends and colleagues—especially in the case of women (Fatima &Lodhi, 2015). Thus, further hypotheses are:

H5: Media positively affects Metrosexuals

H6: Metrosexual men are positively affected by physical attractiveness

H7: Metrosexual men are positively affected by self-image

H8: Metrosexual men are positively affected by the consumption trends for male grooming products

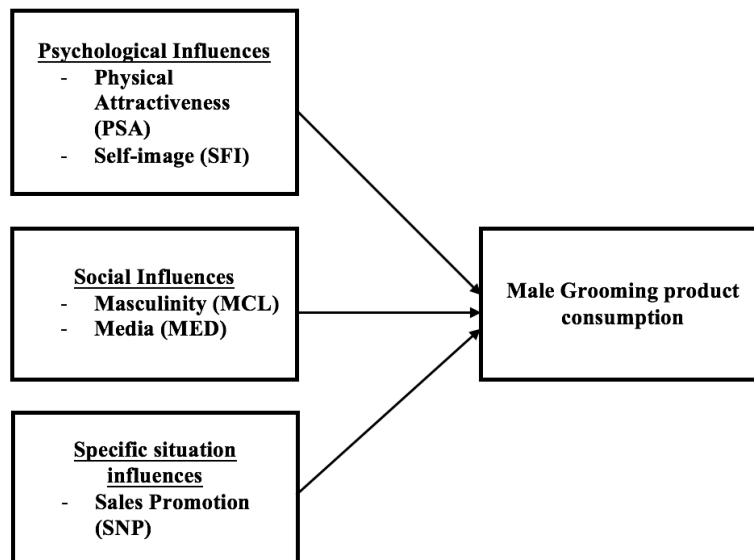
H9: Advertising has a negative effect on the consumption of male grooming products

### 2.3 Specific situation influencers

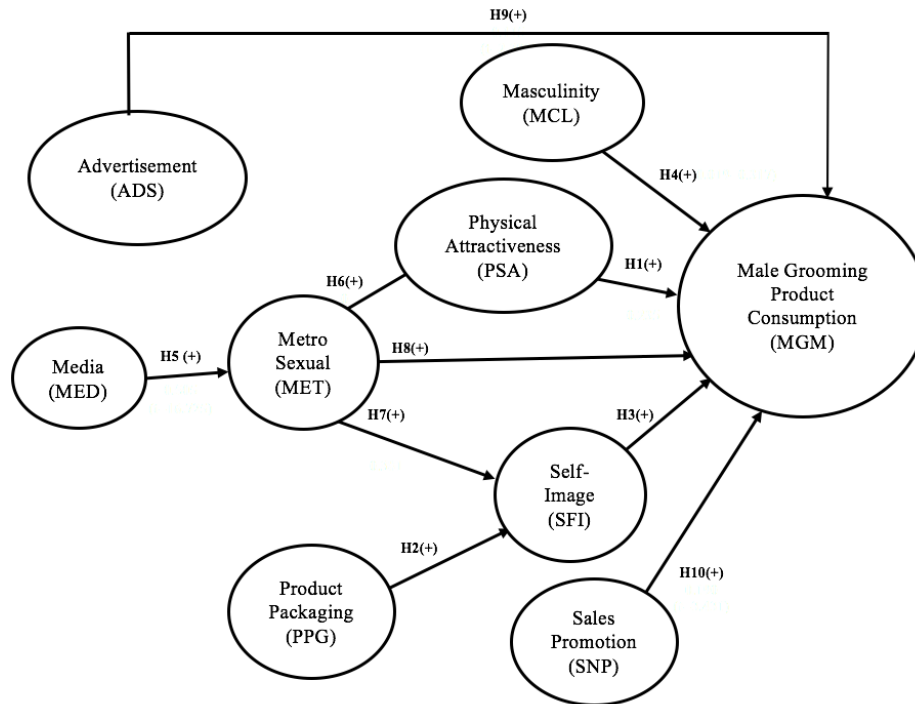
#### 2.3.1 Economic factor and sales promotion

Sales promotion activities such as giveaways, vouchers and coupons, free samples and buy-one-get-one-free are some of the strategies that companies have used to increase its sales, encouraging customers to use or try their products, while at the same time creating brand recognition (Blackwell et al., 2001). Owing to some studies, discounted pricing technique is a significant factor in stimulating customers to try a product (Shimp, 2003).In some significant economic situations, cosmetics companies have emphasized advertising to remain profitable (Drunker,1995).

H10: Sales promotion positively affects the consumption of male grooming products



**Figure1-** Conceptual model



**Figure 2** - Structural expected hypothesis model

### 3. RESEARCH METHODOLOGY

To attain the deeper knowledge and gain the clearer men's perception of male cosmetic products, Survey research method has been adopted for testing the proposed research model (Figure 2).

#### 3.1 Questionnaire

To achieve the well-designed questionnaire, researchers conducted the exploratory questionnaire by interviewing with Taiwanese and Thai male first in order to gain overall idea before generating the hypotheses. Participants who took part in this interview are the person who researchers have a close relationship with in order to avoid the embarrassment of the attendant and to encounter the social desirable bias. All of the opened-end questions were listed in advance and before the interview started, Meaning and definition of men's care products were explained to prevent the misinterpretation of word "cosmetics" which usually known as beauty aid for female. During the interview, the participants were opened to respond, clarify and explain their own perspective towards male cosmetic products. They were also asked to give an explanation of their daily self-care regimen since waking up till going back to sleep. Receiving this in-depth information from participants have helped researchers to understand more about details of each variable and also gained the brief idea in order to design the questionnaire that well-suit to the developed hypothesis.

In order to provide the most validity of the survey, all of the 60 testing questions and statements of each variables were extracted from the prior researches as follows; For the evaluation of Physical Awareness, we referred to the questionnaire from Psychology Today (Vivian Diller, Hara Diller, Estroff, 1997), Product Packaging, Self-image and Sales and Promotion were adopted from (Erzoy, Yolal and Batmaz, 2015), To study Masculinity Ideology, we obtained from (Chu and Porche, 2015), we also

extracted the questionnaire from How does Media affect teenager self-esteem for Media statements (Online Survey from SurveyMonkey), Metrosexual was from (Chun, Shin, Koh, 2013), We evaluated Advertisement factor by statements from (Bishnoi, V.K., & Sharma, R., 2009), Male Grooming Product questions and Metrosexual Characteristic were from Consumer behavior (Hoyer, MacInnis and Pieters, 2012) and Preliminary Study on the Metrosexual Stereotype (Pan and Jamnia, 2015), respectively.

Our questionnaire consists of 3 parts closed-ended questions. First section contained the statements for examining the critical factors that could have an influence on desire of cosmetics products consumption. Each participant has been requested to evaluate the questions and score the level of agreement/disagreement on a 5 point Likert scale. Number 1 represented Strongly Disagree while 5 represented Strongly Agree. Second part comprised of multiple choice questions to measure the individual metrosexual characteristic. Finally, the last section would ask participants to fill out the demographic data such as age, education and income. To overcome the language barriers, the survey has been designed in English first, then followed by translation into Thai and Taiwanese to reduce the cross-cultural misunderstanding and to ensure that the respondents would totally perceived the right meaning in every statement in the questionnaire so as to gain the utmost accurate and precise outcome.

So as to avoid any inaccurate result which might gain from bias questionnaire design, unwilling to provide the honest answer from participants, misunderstanding of the question or even any other possible forms of error, Pre-testing has been concerned and adopted in the early stage before actual questionnaire delivery to the target sample so as to provide the most validity. Pre-testing is the experimental testing to assure the truthfulness of questions that literally have the relationship with target sample.

### *3.2 Exploratory factor analysis*

EFA is a method that help determine the connection between each variable that previous assumed in the model. This tool would help balancing and developing the model by eliminating the unrelated factors. Orthogonal rotation called Varimax Normalized technique was adopted to clarify the conceptual model. The relationship of measured variables would be indicated as numerical value. Higher value of the factor loading would represent the strength of the bond between those two factors. After we conducted the pre-testing by exploratory Factor Analysis, 28 questions were eliminated and 32 questions has remained (Mark Loadings are  $> 0.6$ ). So, we distributed the questionnaire to at least 320 participants which according to rules of 10 to assure that the sample data we obtained are adequate (Garson, 2008).

### *3.3 Selecting research participants*

Regarding to one study, the global trend reduces the dissimilarity of lifestyle affinities between people all over the world but also simultaneously emerge the in-country prospect differences as well (Teret et al., 2002). To extend the frontier of studying, using cross cultural research methodology has become very necessary and helpful in present day to help marketers gain a deeper understanding of how men have attitude on cosmetic products which has been changing since the fast growing of global marketing (Samiee and Jeoung, 1994).

To compare consumer behavior between people from diverse backgrounds, similarity of sample's demographic characteristics is needed in favor of obtaining the most accurate outcome as much as possible (Reynolds et al., 2003). Narrowing down the group of target sample would help researchers to compare the important variables and control unrelated factors that might have an effect on the actual result. We then pinpointed the person who are involving in Engineering and Communication Art



department aged between 18-35 years old which are both university students and already graduated and currently working as full-time employee as our target sample. Engineering department was chosen to be the first target group due to prior study that Engineering students seem to be notably as masculine, vigorous and at the same time behave less feminine (De Pillis, Emmeline, de Pillis., & Lisette (2008), meanwhile Communication Art Department was also taken into consideration as a result of their future and current job are involving in Media, they were assumed to concern more about their appearance and body image. Researchers believed that with those drastically contrast of perspective and behaviors among these two groups were efficient to represent the whole rest of men in terms of cosmetic consuming behavior. However, the result from one study from University of Akron showed that perspective on body image between Engineering and Exercise Science Student are insignificant different (Parsons, 2015). But, the participants who took part in the previous comparative study were comprised of male and female. In this study, the testing would evaluate more by specific on men only which would better represent whether the various nation background could make an impact on body image behavior among men or not.

Taiwanese data was all collected from National Formosa University while Thai was from Chulalongkorn and Thammasat University. The surveys were distributed to student before classes since obtaining the permission from professors, whereas worker data were collected from both night classes and through online survey in Alumni association on Social media – Facebook Page.

### *3.4 Data analysis*

The 5 point Likert scale and multiple choice questions for measuring individual metrosexual characteristic in Part 1 and 2 of this study were processed with LISREL 8.8 to evaluate and measure across the relationship between the factors and the latent variables in assumption models: PSA = Physical Attractiveness, PPG = Product Packaging, SFI = Self-image, MCL = Masculinity, MED = Media, MET = Metrosexual, ADS = Advertisement, SNP = Economic factor and Sales Promotion, MGM = Male Grooming Products. All of exploratory factor analyses in this study used the covariance matrix. Covariance model was used for boundary estimation of the one-hypothesized factor model, it has become popular and widely known computer software among analysts in these days.

### *3.5 Confirmatory Factor Analysis*

CFA is a basic technique that implements to examine the credibility of the predicted factors that would guide to their latent variables. Linear Structural Relationships or LISREL was operated since it suits working with the complex and multi-level model such as multi-group comparison by providing the estimated mean value among various target group and there were several previous researches that applied LISREL as seen by a number of program's versions that have been updated in decades. LISREL provides many varieties of statistic tools that use to determine how proper of data are and one applied theory is "goodness of fit" that would present the degree of how well the expected model are and provide the primary support that those expected models should be accepted or rejected. To accept the adequacy fit of expected model to the data, one specific tool might not sufficient to indicate how proper model are. Multiple measurements would be evaluated simultaneously in order to combine all of the perspective of data and It would help expand researchers' horizon to complete the model's whole picture.

### 3.6 Descriptive Statistics

Descriptive Statistics was also implemented in this study by STATISTICA 10 due to the diversity of demographic data collection in age, educational background, Occupation, Income and Nationality. Descriptive Statistics is defined as the indicator that help to describe and simplify the quantitative data into the summary form. The common data set of participant in this study would be divided and presented in percentage as called measures of variability evaluation. This method would help analyze the spread of the distribution data and also help understand the proportion of target sample data of this research.

## 4. RESULTS

### 4.1 Demographic Data

A demographic profile of the respondents has presented the data of total 648 participants which comprised of 323 Thai and 324 Taiwanese. The group of age 20-25 years old was shown as the biggest population by 55.3%. Most of the subjects came from student (61.0%). About 51.2% of the subjects had income lower than \$300 US dollars and most of them were from Engineering Department (see table 1).

Characteristics	Categories	Frequency	Percentage
<b>Nationality</b>	Thai	323	(49.8%)
	Taiwanese	324	(50.0%)
<b>Age</b>	Under 20	181	(27.9%)
	20 – 25	358	(55.3%)
	26 – 30	67	(10.3%)
	Over 30	41	(6.3%)
<b>Occupation</b>	Student	395	(61.0%)
	Employee	252	(38.9%)
<b>Income</b>	Less than \$300	332	(51.2%)
	\$301-\$450	74	(11.4%)
	\$451-\$600	52	(8.0%)
	\$601-\$990	81	(12.5%)
	More than \$990	108	(16.7%)
<b>Department</b>	Engineering	405	(62.5%)
	Communication Art	242	(37.3%)

**Table 1** : Description of the responses (n=648)

Factor Analysis Variables and measurement items (Sources)		Standardize d loading <sup>a</sup>	Mean (Total)	Mean (Thailand)	Mean (Taiwan)
PSA 1-5	Physical attractiveness (Vivian Diller, Hara Diller, Estroff,1997)	>0.06	3.420	3.17	2.67
PPG 7-10	Product Packaging (NeziheFigenErzoy, MedetYolal, BulentBatmaz, 2015)	>0.06	3.625	3.125	3.875
SFI 11-12	Self-image (NeziheFigenErzoy, MedetYolal, BulentBatmaz, 2015)	>0.06	2.500	3.750	4.000
MCL 13-16	Masculinity (Judy V. Chu, Michelle V Porche, 2015)	>0.06	3.750	3.250	3.500
MED 17-19	Media (Online Survey from Surveymonkey)	>0.06	2.833	2.333	2.833
MET 20-22	Metrosexual (Su-Young Chun, Yuen Wook Shin, Ae-Ran Koh, 2013)	>0.06	3.333	3.333	4.000
ADS 23-25	Advertisement (Vinod Kumar Bishnoi, Ruchi Sharma, 2009)	>0.06	2.833	2.833	2.833
SNP 26-31	Sales and Promotion (NeziheFigenErzoy, MedetYolal, BulentBatmaz, 2015)	>0.06	2.083	2.750	2.583
MGM 32	Male Grooming Products (Hoyer, Maclnnis and Pieters, 2012)	>0.06	4.000	3.500	3.000

**Table 2-** EFA items and loadings (N=648)<sup>a</sup>The significant of factor loadings are at  $P < 0.05$

#### 4.2 Covariance Analysis

	PSA	SFI	MET	MGM	PPG	MCL	MED	ADS	SNP
PSA	0.357								
SFI	0.255	0.853							
MET	0.207	0.408	0.595						
MGM	0.164	0.218	0.219	0.868					
PPG	0.203	0.403	0.284	0.189	0.462				
MCL	0.163	0.206	0.170	0.126	0.144	0.387			
MED	0.160	0.311	0.358	0.171	0.221	0.185	0.709		
ADS	0.118	0.221	0.251	0.194	0.245	0.160	0.300	0.646	
SNP	0.114	0.185	0.149	0.174	0.145	0.146	0.187	0.217	0.470

**Table 3** -Covariance Matrix of the Measure Variables

(PSA = Physical Attractiveness, PPG = Product Packaging, SFI = Self-image, MCL = Masculinity, MED = Media, MET = Metrosexual, ADS = Advertisement, SNP = Economic factor and Sales Promotion, MGM = Male Grooming Products)

Covariance Matrix is descriptive measure of the linear association between two variables. Every figure that has been plotted in the table show the covariance of each variable against every other variable. A positive number indicated a direct of linear relationship while the negative number indicated the decreasing of linear relationship. This matrix only focused on the direction of number not the degree unless covariance was shown at or around zero amount which could indicate that there had no connection between those two factors. In Table2, all figures were found positively which mean the linear relationship between each individual variable was obviously related. The value in the diagonal has revealed that the variance of each individual variable themselves was also presented affirmatively but in various amount due to the fact that the strength of the linear relation didn't involve with the result that were evaluated by in covariance matrix (see table 3).

#### 4.3 Goodness of fit testing

First, we tested the fitness of the model for measurement the relationship between predicted variables. Evaluation of the goodness of model was not as straightforward to evaluate by individual statistical testing. Since there was no any statistical approach process without error, various techniques would be used to examined synchronously in order to properly determine the fit of data. The fit indices of the model in this study are shown in Table 4.

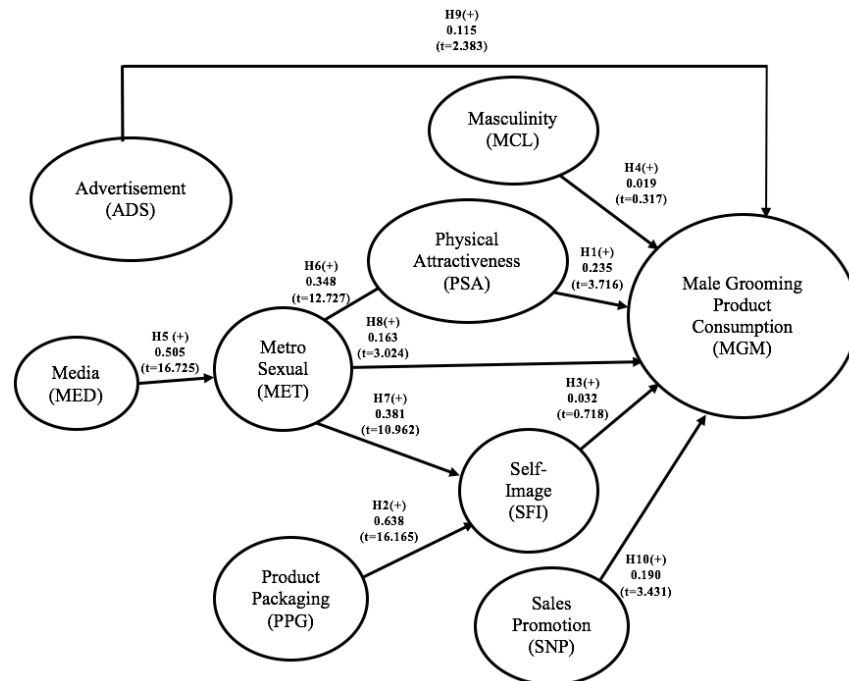
Although Normal Theory Weighted Least Squares Chi-Square and RMSEA were significant ( $\chi^2=266.439$ , RMSEA=0.156) due to the fact that the data were gathered from large sample size that came from many different backgrounds in universities, age and various departments. However, this shouldn't be the reason that expected model should be rejected because large number of sample size could have an effect on the statistically significant (Tanaka J.S., 1987). As LISREL provides many tools for Good of fit testing, other measurements should be taken into researchers' consideration to evaluate the most accurate estimation.

GFI or Good for of data is another measurement that gives the relationship explanation by providing relative number between covariance and variance of total data. The good fit of model normally represented by value above 0.90. However, GFI of this model has been given 0.916 which means it yielded a good fit of model.

NFI or normed fits index which used to compare between the fit of one model with another. The fitted index value's range is between 0.00 and 1.00. The satisfactory value of NFI should equal 0.90 or above. NFI of this model has been shown 0.90 which represented that the proposed measurement model is adequately well fit.

Both CFI and IFI are also good of fit testing measurement that is suggested to operate well with all sample sizes. CFI is also reported as one of the steady measurement that have least effected by the number of sample size (Fan et al, 1999). The value above than 0.90 is preferred with regard to models would be accepted. The CFI and IFI value were equal 0.905 and 0.909, respectively. These could suggest that the expected model was good of fit.

The Root Mean Square Residual or RMR represents the relationship between predicted variances and covariance by showing residue value. The value of the RMR are supposed to equal 0.1 or less to meet the well-fit model. The RMR of this study presented 0.0634 which was adequate to indicate a well-fit model.



Chi-square = 266.44, df = 16, p-value = 0.00, RMSEA = 0.156

**Figure 3 - Result of structural hypothesized model obtained with total measurement items ( $P < 0.01$ )**

**Table 4** – Goodness of fit Indices of the Proposed Model

Normed $\chi^2$	RMSEA	GFI	NFI	CFI	IFI	RMR
266.439	0.156	0.916	0.90	0.905	0.909	0.0634

#### 4.4 Analyses of Estimates and T-Value

##### 4.4.1 Tests of Significance

Parameter estimation is the descriptive measurement of entire population that is very necessary for analyst to determine the covariance level of each variable and it helped researchers gained more significant insights for predicted model evaluation.

Another significant statistical approach that helped analysts support the acceptance or rejection of hypothesis is called P-value evaluation. P-value is as a probability calculation index that measuring the reliability of the support evidence that strong enough to against the null hypothesis ( $H_0$ ); no difference and alternative hypothesis ( $H_1$ ); the meaning is in contrast.

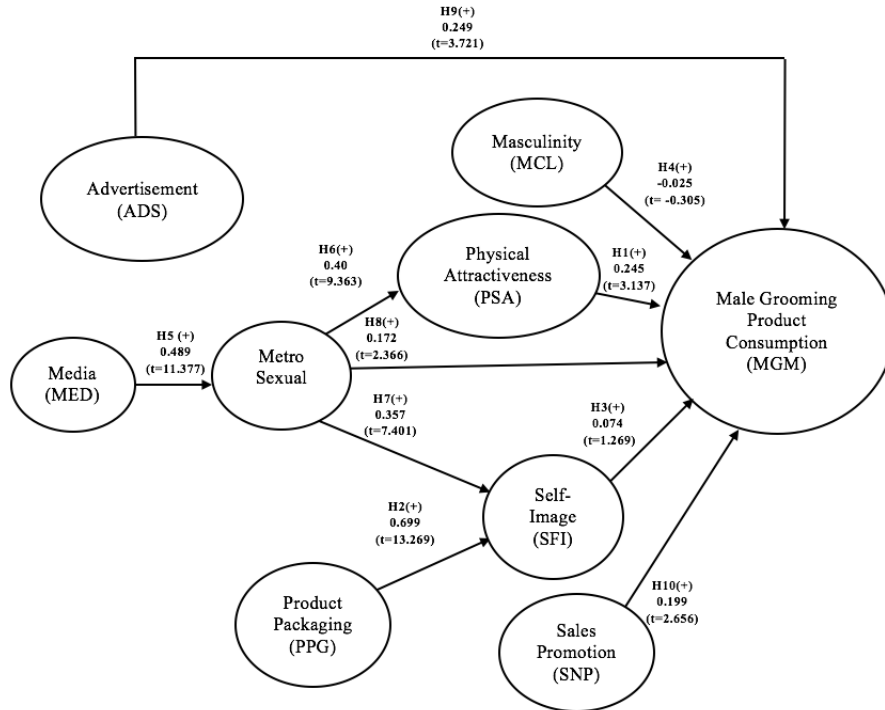
Figure 3 shows the LISREL output that comprised of the value of estimates and t-value, respectively. T-value, which represents the division result of the Parameter estimate over its standard error, is the important indicator to summarize that the primary predicted model should be accepted or rejected. For this study, t-test statistic value larger than 1.96 indicates the significant of parameter estimate at 0.00 probability level ( $p < 0.01$ ). The p value of 0.00 means the result is highly significant.

##### 4.5 Invariance Measurement

The invariance measurement especially in the structural difference between Taiwanese and Thai men which represent the cross-cultural research has become really essential in these. The invariance measurement has been applied in this study to provide the similarities and differences results of participants from different backgrounds by first running individual CFAs. The examination of the invariance in each group were freely estimated and the fit indices of both Taiwanese ( $\chi^2 = 164.639$ , Normed  $\chi^2 = 137.479$ , RMSEA= 0.154, GFI = 0.914, NFI = 0.900, CFI = 0.907, IFI = 0.909 and RMR = 0.0608) and Thai model ( $\chi^2 = 165.641$ , Normed  $\chi^2 = 137.249$ , RMSEA= 0.155, GFI = 0.913, NFI = 0.907, CFI = 0.915, IFI = 0.915 and RMR = 0.0659) yielded the adequately fit of data (see table 5).

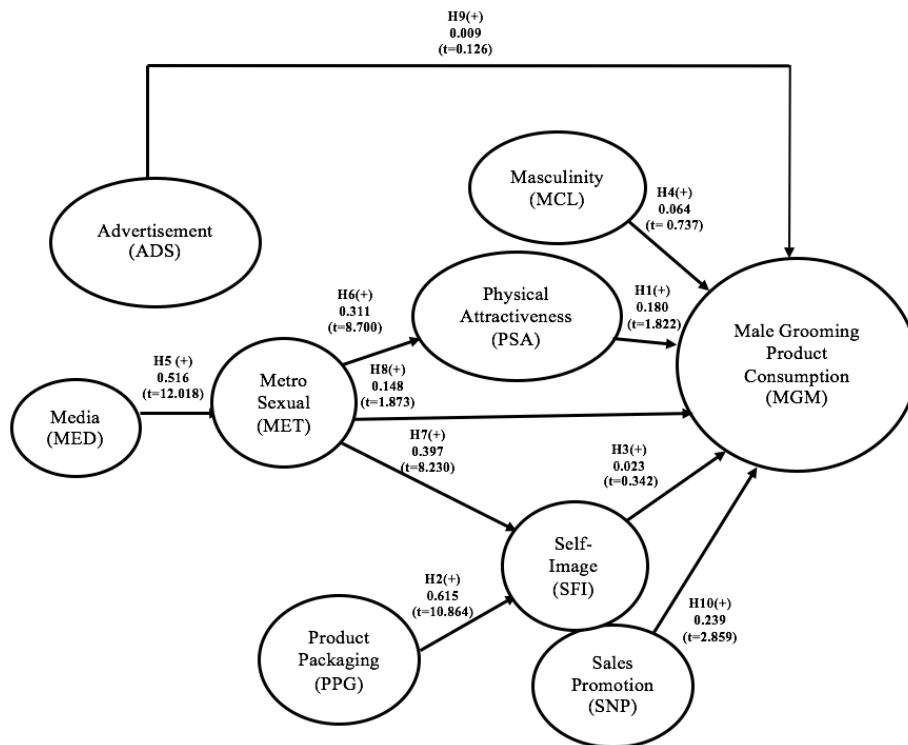
Model	$\chi^2$	Normed $\chi^2$	RMSEA	GFI	NFI	CFI	IFI	RMR
Taiwanese	164.639	137.479	0.154	0.914	0.900	0.907	0.909	0.0608
Thai	165.641	137.249	0.155	0.913	0.907	0.915	0.915	0.0659

**Table 5** - Results of Invariance matrix models ( $P < 0.01$ )



Chi-square = 137.43, df = 16, p-value = 0.00, RMSWA = 0.154

Figure 4 - Taiwanese male (N=324)



Chi-square = 137.25, df = 16, p-value = 0.00, RMSWA = 0.155

Figure 5- Thai male (N=323)

#### 4.6 Hypothesis Testing

##### 4.6.1 Psychological influences

#### Hypothesis 1: Physical Attractiveness on consumption of male grooming products

From supporting by LISREL analysis, Physical Attractiveness had an influenced on considering of male grooming products consumption in Total participants ( $t = 3.716$ ,  $p < 0.01$ ) and Taiwanese men ( $t = 3.137$ ,  $p < 0.01$ ) but hasn't been supported by the result from Thai male ( $t = 1.822$ ,  $p < 0.01$ ).

**Table 6 - Hypothesis1**

Group	T-Value <sup>a</sup>	Results
Total participants	<b>3.716</b>	<b>Supported</b>
Taiwanese	<b>3.137</b>	<b>Supported</b>
Thai	1.822	Not Supported

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*

#### Hypothesis 2: Product Packaging has positive effect on Self-image

Self-Image has been predicted by Product Packaging factor among the population divided by total participants, Taiwanese and Thai men, respectively. ( $t = 16.165$ ,  $p < 0.01$ ), ( $t = 13.269$ ,  $p < 0.01$ ), ( $t = 10.864$ ,  $p < 0.01$ ).

**Table 7 - Hypothesis 2**

Group	T-Value <sup>a</sup>	Results
Total participants	<b>16.615</b>	<b>Supported</b>
Taiwanese	<b>13.269</b>	<b>Supported</b>
Thai	<b>10.864</b>	<b>Supported</b>

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*

#### Hypothesis 3: Self-Image has positive effect on consumption of male grooming products

Male Grooming Product Consumption in all groups hasn't been supported by the prediction of Self-Image. ( $t = 0.718$ ,  $t = 1.269$ ,  $p < 0.01$ ) and ( $t = 0.342$ ,  $p < 0.01$ ).

**Table 8 - Hypothesis 3**

Groups	T-Value <sup>a</sup>	Results
Total participants	0.718	Not Supported
Taiwanese	1.269	Not Supported
Thai	0.342	Not Supported

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*



## 4.6.2 Social Influences

Hypothesis 4: Masculinity influences on consumption of male grooming products

Male Grooming Product Consumption hasn't been affected by Masculinity in total participants group ( $t = 0.317$ ,  $p < 0.01$ ), and also showed negatively among Taiwanese and Thai male as follows; ( $t = -0.305$ ,  $t = 0.737$ ,  $p < 0.01$ ).

**Table 9- Hypothesis 4**

Groups	T-Value <sup>a</sup>	Results
Total participants	0.317	Not Supported
Taiwanese	-0.305	Not Supported
Thai	0.737	Not Supported

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*

**Hypothesis 5: Media positively effect on Metrosexual**

Hypothesis 5 has been supported by the LISREL analysis owing to the represented output show that Metrosexual has been expected by Media in total participants group, Taiwanese and Thai men ( $t = 16.725$ ,  $t = 11.377$ ,  $t = 12.018$ ,  $p < 0.01$ ).

**Table 10- Hypothesis 5**

Groups	T-Value <sup>a</sup>	Results
Total participants	<b>16.725</b>	<b>Supported</b>
Taiwanese	<b>11.377</b>	<b>Supported</b>
Thai	<b>12.018</b>	<b>Supported</b>

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*

**Hypothesis 6: Metrosexual men positively effects on physical attractiveness**

Physical Attractiveness among all groups has been affected by Metrosexual characteristic ( $t = 12.727$ ,  $t = 9.363$ ,  $t = 8.700$ ,  $p < 0.01$ ).

**Table 11- Hypothesis 6**

Groups	T-Value <sup>a</sup>	Results
Total participants	<b>12.727</b>	<b>Supported</b>
Taiwanese	<b>9.363</b>	<b>Supported</b>
Thai	<b>8.700</b>	<b>Supported</b>

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*

**Hypothesis 7: Metrosexual men positively effects on Self-image**

Metrosexual among all groups had an effect on Self-Image ( $t = 10.962$ ,  $t = 7.401$ ,  $t = 8.23$ ,  $p < 0.01$ ).

Groups	T-Value <sup>a</sup>	Results
Total participants	<b>10.962</b>	<b>Supported</b>
Taiwanese	<b>7.401</b>	<b>Supported</b>
Thai	<b>8.230</b>	<b>Supported</b>

**Table 12- Hypothesis 7**

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*

**Hypothesis 8: Metrosexual men positively effects on consumption of male grooming products**

Metrosexual had an impact on consumption of male grooming products consideration in total participants group and Taiwanese as t-value were shown above 1.97 ( $t = 3.024$ ,  $t = 2.366$ ,  $p < 0.01$ ) while there had no significant relationship between Metrosexual and consumption of male grooming products consideration among Thai men since t-value are less than 1.96 ( $t = 1.873$ ,  $p = 0.00$ ).

**Table 13- Hypothesis 8**

Groups	T-Value <sup>a</sup>	Results
Total participants	<b>3.024</b>	<b>Supported</b>
Taiwanese	<b>2.366</b>	<b>Supported</b>
Thai	1.873	Not Supported

**Hypothesis 9: Advertisement has positive effect on consumption of male grooming products**

The results show that Advertisement had a consequence on consumption of male grooming products consideration among total participants group and Taiwanese ( $t = 2.383$ ,  $t = 3.721$ ,  $p < 0.01$ ). In contrast, Male Grooming products consideration hasn't been affected by Advertisement among Thai men ( $t = 0.126$ ,  $p < 0.01$ ).

**Table 14 - Hypothesis 9**

Groups	T-Value <sup>a</sup>	Results
Total participants	<b>2.383</b>	<b>Supported</b>
Taiwanese	<b>3.721</b>	<b>Supported</b>
Thai	0.126	Not Supported

<sup>a</sup>*t-value greater than 1.96 or less than -1.96 are shown in bold letters*

## 4.6.3 Specific situation influencers

**Hypothesis 10: Sales Promotion positively effects on consumption of male grooming products.**

The t-value of all three groups have indicated above 1.96 which means that Sales Promotion had impact on consumption of male grooming products consideration ( $t = 3.431$ ,  $t = 2.656$ ,  $t = 2.859$ ,  $p < 0.01$ ).

**Table 15 - Hypothesis 10**

Groups	T-Value <sup>a</sup>	Results
Total participants	<b>3.431</b>	<b>Supported</b>
Taiwanese	<b>2.656</b>	<b>Supported</b>
Thai	<b>2.859</b>	<b>Supported</b>

<sup>a</sup>t-value greater than 1.96 or less than -1.96 are shown in bold letters

**Metrosexual Characteristic**

Metrosexual Characteristic of the respondents were presented in mean value as follows;

Metrosexual Characteristic (Pan and Jamnia, 2015)		Standardized loading <sup>a</sup>	Mean (Total)	Mean (Thailand)	Mean (Taiwan)
1	How many times do you look at the mirror each day	>0.06	2.000 (2 times/ Day)	3.000 (3 times/day)	1.500 (between 1 and 2 times)
2	Can you leave the house without putting product in your hair	>0.06	2.000 (could leave)	2.000 (could leave)	2.000 (could leave)
3	Do you moisturize daily	>0.06	3.000 (Always)	3.000 (Always)	2.000 (Sometimes)
4	Not counting sneakers, how many pairs of shoes do you own	>0.06	3.000 (3 pairs)	3.000 (3 pairs)	2.500 (between 2 and 3 pairs)
5	Have you ever tweezed, waxed or trimmed your eyebrows	>0.06	1.500 (Used to)	1.000 (Never)	1.500 (Used to)
6	How much do you spend on haircut	>0.06	3.000 (\$11-\$20)	2.000 (<\$10)	3.000 (\$11-\$20)
7	Going to shopping is...	>0.06	1.500 (when necessary)	1.500 (when necessary)	1.500 (when necessary)

**Table 16** - Table of Metrosexual Characteristic Testing (N=648)

<sup>a</sup>All factor loadings are significant at  $P < 0.05$

## 5. CONCLUSION AND DISCUSSION

### 5.1 Discussion

Study of Male Grooming products consuming behavior among Thai and Taiwanese men in this research is devoted to the main indicators that reflect on how men have an attitude towards men's care products. The results show that main factors actually came from both internal and external motivations which will reflect how men in each nationality behaved in particular way.

## 5.2 Main factors that influences on Male Grooming products consumption consideration

### 5.2.1 Physical Attractiveness

Physical attractiveness is used to explain the awareness of how other people have on individual self. According to one study discussed that cosmetics usage can lead people, both male and female, become more attractive (Graham and Jouhar, 1980). However, our first hypothesis (**H1**) has been accepted which means Physical Attractiveness of our population was one of the factors that had an influence on male grooming products consumer behavior since the more individual concerns about how people had spot light on them, the more they considered to apply grooming product. But, after divided the data into Taiwanese and Thai men, we found that concerning about Physical attractiveness have only affected on cosmetics consumption among Taiwanese but not Thai. So, we came up with the conclusion that Physical Attractiveness might not be the certain reason when come to decision to purchase male grooming product among Thai men.

### 5.2.2 Self-Image

According to result estimated by LISREL, the relationship between self-image of individual men from total sample participants that gathered from both Taiwanese and Thai male showed negatively to Male Grooming Products consumption which opposed to our 3<sup>rd</sup> hypothesis (**H3**) and prior research which purposed that Self-image can leads the attitude of men towards male's care product consumption (Cheng, Ooi, C. and Ting, 2010). However, applying cosmetics products might not be the only way for the man who concerns about self-image. Apart from pretty face, body measurement has become one factor that most men especially Taiwanese do care for. Some Taiwanese interviewee also mentioned in the interviewing process that as much as self-image is mattered, they would keep body in shape rather than applying the cosmetics especially the color cosmetics which might represents to the characteristic of gay. Another participant in the interview also gave the further comment that he gives the priority to clothing much more than skincare. One prior study also suggested that to obtain the ideal body, the most effective solution for men is to do physical exercising which including body mass building and fat burning (Devis and Clowles, 1991). Regarding to product packing is also reflect people's self-image, the second hypothesis (**H2**) has also been supported by the result from this study which conforms to the prior study that product packaging are ranked as one of the features that could enhance the desire for consumption of male-specific cosmetic products (Mintel, 2015).

### 5.2.3 Masculinity

There are several researches stated that masculinity is one of the massive intention that leads to cosmetic products consideration. With regards to masculinity definition revolution in 1980s, men since then started to concern about how they look so as to impress others (Nixon, 1996). One study also suggested that culture differences would have the influences on male cosmetic products consumption behavior (Rangkaputi, 2017). Our hypothesis 4 (H4), however, the result from this study has rejected to those studies since the final outcome of total Thai and Taiwanese pinpointed that the consumption of male Grooming Product has unrelated to masculinity. One probably reason of negative outcome is that, regarding to all of questions we used to test masculinity factor were extracted from the prior researches which were still clinging on the old definition of masculinity and that might not represent the attitude and personality of men in current era. We then could conclude that the definition of masculinity has already changed which is the effect of advanced technology that can shrink the world to become smaller and people tend to share the same culture and belief.

#### 5.2.4 Metrosexual

The earlier studies already mentioned that metrosexual is characterized by emphasis on self-image which means that far more than clothing concern, purchasing and using cosmetic products have been taken into their consideration as well (McNeill & Firman, 2014). The result of the total population and Taiwanese group in this present research has also been in line with the result from those previous researches as well. In contrast, the result that derived from Thai group has showed unrelated relationship with male grooming products consuming consideration. Our hypothesis 6,7 and 8 (**H6, H7, H8**) have supported as we concluded that Metrosexual is involved with both Physical Attractiveness and Self-image since the consequence of the outcome from LISREL. Besides, our proposed hypothesis 5 (**H5**) has also accepted in this study due to the result indicated that media had an influence on the rising degree of metrosexual characteristic which would be corresponding to one research that the emerging of “metrosexual” is an effect of media (Conseur, A.A., 2004).

#### 5.2.5 Advertisement

This factor has become controversy whether advertisement, nowadays, still having an effect on the consumer behavior or not. Yet, the outcome of this study showed that Advertisement still had an effect on consumption of male grooming cosmetics products among total population especially in Taiwan (Our hypothesis 9 has been accepted) but Advertisement has considered as no influence effect on Thai male in modern day which in line with previous study of Thai male consumer behavior which indicated that the most potential influencer for trying new cosmetics among Thai male is friends (Yuan and Thanawatdej, 2006).

#### 5.2.6 Sales and Promotion

The tenth hypothesis has been accepted (**H10**) due to the fact that the acquired result of this research showed that Sales and promotion has positively related to the consumption of male grooming products which was in line with the prior research of the customer behavior in the men’s cosmetics market. Their conclusion conducted by group discussion and participants were asked to what extent factor that they were looking for when they were looking for male’s care product and price is shown as the top-ranked answer among interviewee (Audrey, Cyrielle and Quentin, 2007).

#### 5.3 Limitation and future research suggestion

According to obtain the most solid outcome from cross-different questionnaire, the consistent of target sample between those two countries are very important in order to control unrelated variables that could mislead the total outcome. Our testing has been designed by narrowing down to the student and workers who involved in Engineering and Communication Art department instead of conducting by randomizing techniques which might not provide the proper outcome. Our limited selected target group then might not be the best representative for the whole population from both Taiwan and Thailand. Also, the total number of participants, especially in Taiwan, has been mostly gathered from students which came from the limitation of survey distribution time might had impact on the result from money factor when comes to participant’s consideration of the Sales and Promotion in this research that showed positively related to desire of cosmetic buying. Besides, both compared countries also located in the same continent which might haven’t much different in terms of culture and social belief. For future research, I would suggest to expand the boundary of research by comparing between European and Asian countries which might present the interesting perspective and provide the further exotic result. Since marketers nowadays couldn’t focus only one market anymore since the relentlessly widespread of culture, analyst

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then should keep observing on the consumer behavior especially the role of men that has been changed to which direction it is going to be in the future.

**References**

- [1]. ACNielsen (2009). L'oreal UK a man's grooming report 2010. Retrieved from [http://www.loreal.co.uk/\\_en/\\_gb/pdf/LOreal\\_Mens\\_Grooming\\_Report\\_FINAL.pdf](http://www.loreal.co.uk/_en/_gb/pdf/LOreal_Mens_Grooming_Report_FINAL.pdf).
- [2]. Audrey, B., Cyrielle, C., & Quentin, L. (2004). *The customer behavior in the men cosmetic market*. Retrieved from <https://pdfs.semanticscholar.org/6cba/98207a45f4865e4c39f537b8072a864db0ce.pdf>
- [3]. Agliata, D., & Dunn, S.T. (2004). The impact of media exposure on males' body image. *Journal of social and Clinical Psychology*, 23(1), 7-22.
- [4]. Ampuero, O., & Vila, N. (2006). Consumer perceptions of product packaging. *Journal of consumer marketing*, 23(2), 100-112.
- [5]. Baumeister, R.F., Campbell, J.D., Krueger, J.I. and Vohs, K.D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the public interest*, 4(1), 1-44.
- [6]. Bishnoi, V. K., & Sharma, R. (2009). The Impact of TV Advertising on Buying Behaviour: A Comparative Study of Urban and Rural Teenagers. *JK Journal of Management & Technology*, 1(1), 65-76.
- [7]. Blackwell, R.D., Miniard, P.W. & Engel, J.F. (2001). *Consumer Behavior*, ninth edition: Harcourt.
- [8]. Cheng, F. S., Ooi, C.S. & Ting, D.H. (2010). Factors Affecting Consumption Behavior Of Metrosexual Toward Male Grooming Products. *International Review of Business Research Papers* Vol.6, 574-590.
- [9]. Chu, J., Porche, M. & Tolman, D. (2005). Men and Masculinities: The Adolescent Masculinity Ideology in Relationships Scale Development and Validation of a New Measure for Boys. 8(1), 93-115. DOI: 10.1177/1097184X03257453.
- [10]. Conseur, A. A. (2004). Factors influencing the emergence of the metrosexual (Doctoral dissertation, uga).
- [11]. Daniel, S. & Bridges, S. K. (2013). The relationships among body image, masculinity, and sexual satisfaction in men. *Psychology of Men & Masculinity*, 14(4), 345-351.
- [12]. Davis, C. & Cowles, M. (1991). Body image and exercise: A study of relationships and comparisons between physically active men and women, 25(1-2), 33-44.
- [13]. De Pillis, Emmeline, de Pillis, & Lisette (2008). Are engineering schools masculine and authoritarian? The mission statements say yes. *Journal of Diversity in Higher Education*, 1(1), 33-44.
- [14]. Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24(3), 285-290.
- [15]. Diller, V., & Marano, H.E. Retrieved from <https://www.psychologytoday.com/us/articles/199709/physical-attractiveness-survey>
- [16]. Drucker, P.F. (2005). *Managing in a time of great change*, New York: Truman Talley Books/Dutton.
- [17]. Erzoy, N.F., Yolal, M., & Batmaz, B. (2015). Cosmetic consumption of metropolitan males in a developing country. *Studia ubnecotia*, LX, 3, 5-22.
- [18]. Euromonitor (2016). Beauty and personal care in China. Retrieved from <http://www.euromonitor.com/beauty-and-personal-care-in-china/report>.
- [19]. Fan et al. (1999). Effects of Sample Size, Estimation Methods, and Model Specification on Structural Equation Modeling Fit Indexes. *Structural equation modeling a multidisciplinary journal*, 6(1):56-83.
- [20]. Fatima, S., & Lodhi, S. (2015). Impact of Advertisement on Buying Behaviours of the Consumers: Study of Cosmetic Industry in Karachi City. *International Journal of Management Sciences and Business Research*, 4 (10).



- [21]. Fiona, S., &Elke, P. (1998). Making himself attractive: the growing consumption of grooming products. *Journal of Marketing Intelligence and Planning*, 16(5), 337-343. DOI: 10.1108/02634509810229955.
- [22]. Frederick, D. A., Sandhu, G., Morse, P. J., & Swami, V. (2016). Correlates of appearance and weight satisfaction in a U.S. national sample: Personality, attachment style, television viewing, self-esteem, and life satisfaction. *Body Image*, 17, 191–203. DOI: 10.1016/j.bodyim.2016. 04.001.
- [23]. Garson, D. G. (2008). Factor Analysis: Statnotes. Retrieved from <http://www.2.chass.ncsu.edu/garson/pa765/factor.htm>
- [24]. Graham, J.A., &Jorhar, J.A. (1980). Cosmetics considered in the context of physical attractiveness; A review. *International Journal of Cosmetic Science*, 2: 77-101.
- [25]. Hatfield, E., &Sprecher, S. (1986). *Mirror, mirror: The importance of looks in everyday life*. New York: SUNY Press.
- [26]. HemaPatil and BBakkappa (2012). The influence of culture on cosmetics consumer behavior. *Journal of Business and Management*, 3(4),41-47.
- [27]. Hoyer, W.D., MacInnis, D.J., &Pieters, R. (2012). *Consumer Behavior* (6), Cengage Learning.
- [28]. Jaishankar, G. (1998). Converging trends within the European Union: insights from an analysis of diffusion patterns, *Journal of International Marketing*, 6:2, 1998,32-48.
- [29]. Kantar World Panel, (2014).Taiwanese care about oily skin, blackheads & bad teeth. Retrieved from <https://www.kantarworldpanel.com/global/News/Taiwanese-men-care-about-oily-skin-blackheads-and-bad-teeth>.
- [30]. McNeill, L.S.,&Firman, J.L. (2014). Ideal body image: A male perspective on self, *Australasian Marketing Journal*, 22, 136-43.
- [31]. Mintal (2015).The global trends making over the men’s grooming market. Retrieved from <http://www.mintel.com/blog/beauty-market-news/the-global-trends-making-over-the-mens-grooming-market>
- [32]. Nixon, S. (1996). *Hard Looks: Masculinities, Spectatorship and Contemporary Consumption, United States: Palgrave Macmillan US*.
- [33]. Online Survey Monkey. Retrieved from [https://zh.surveymonkey.com/survey-taken/?sm=3BWcbM1PZ6JnBKLaXkpLGrPetE1ZAUnY9xAwpX673gObliCAw\\_2FtoXmqpAJnLgeM7UJsQmMv4Q7GF8IZiqw46CvJpucPaMDcQqyuSeg5beKo\\_3D](https://zh.surveymonkey.com/survey-taken/?sm=3BWcbM1PZ6JnBKLaXkpLGrPetE1ZAUnY9xAwpX673gObliCAw_2FtoXmqpAJnLgeM7UJsQmMv4Q7GF8IZiqw46CvJpucPaMDcQqyuSeg5beKo_3D).
- [34]. Pan, H.H., &Jamnia M. (2015). Preliminary Study on the Metrosexual Stereotype. *Research on Humanities and Social Sciences*. 5(10), 113-119.
- [35]. Parsons, A.C.(2015), Body image differences between university students’major of study". *Honors Research Projects*. 172. Retrieved from [http://ideaexchange.uakrin.edu/honors\\_research\\_projects/172](http://ideaexchange.uakrin.edu/honors_research_projects/172).
- [36]. Pathan, S.S. (2011). Adolescent’s attitude towards the opposite-sex. *Journal of Arts Science & Commerce*, Vol.2(4), 192-199.
- [37]. Rangkaputi, S. (2017), Male image, masculinity and consumer behavior related to cosmetic products: a study of Thai men in Bangkok City. Retrieved from <https://epubs.scu.edu.au/theses/547/>.
- [38]. Reis, H.T., Wheeler, L., Spiegel N. &Kernis, H.M. (1982). Physical Attractiveness in Social Interaction: II. Why Does Appearance Affect Social Experience? *Journal of Personality and Social Psychology*, 43(5),979-996.
- [39]. Reynolds, N.L., Simintiras, A.C.,& Diamantopoulos, A (2003). Theoretical justification of sampling choices in international marketing research: Key issues and guidelines for researchers. *Journal of International Business Studies*, 34(1), 80-89.

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- [40]. Samie, S. &Jeong, I.J. (1994). Cross-cultural research in advertising: An assessment of methodologies, *Journal of the academy of marketing science*, 22,205. DOI: 10.1177/0092070394223002.
- [41]. Shimp, T. (2000). A. 2003. Advertising Promotion and Supplement Aspect of Integrated Marketing Communication, 5.
- [42]. Tanaka, J.S. (1987). How big is big enough?": sample size and goodness of fit in structural equation models with latent variables. *Child Development. Wiley on behalf of the Society for Research in Child Development*. DOI: 10.2307/1130296.
- [43]. TerHofstede, F., Wedel, M., &Steenkamp, J. B. E. M. (2002). Identifying spatial segments in international markets. *Marketing Science*, 21(2), 160-177.
- [44]. Tuncay, L.Y. (2004). Conceptualizations of masculinity among a "new" breed of male consumers. *Association for Consumer Research*, 8, 312-27.
- [45]. Yang, E.L., KoeppeL.,& Vazquez. (2015). Men's Standards of Beauty Around the World. Retrieved from [https://www.buzzfeed.com/eugeneyang/mens-standards-of-beauty-around-the-world?utm\\_term=.ey1p4aDGE#.am1ApDqGo](https://www.buzzfeed.com/eugeneyang/mens-standards-of-beauty-around-the-world?utm_term=.ey1p4aDGE#.am1ApDqGo)
- [46]. Yuan, L., &Thanawatdej, K. (2006). Not only cosmetics but attitude: A behavioral study of male consumers in Thai cosmetic market'. Master's Thesis, Malardalen University, Eskilstuna, Sweden.