# Factors Influencing Customer Purchase Intention of Fitness Center Membership: A Case Study of MBA Students at Assumption University City Campus

# Nanthana Rujiramora

Graduate School of Business, Assumption University, Thailand

#### **Abstract**

The increase of fitness center market attracts the investors as the health conscious trend of Thais that boom in last couple years. Numerous new health care businesses are coming to the industry. To keep the leader status in the industry and achieve business goal by increasing profit, the existing companies need to know their customers very well and serve their needs completely. This study aims to determine which factors and criteria influence customer intention to purchase in fitness center membership in central Bangkok area which has three brands, namely Fitness First, TRUE Fitness and Virgin Active. The variables in this conceptual framework are purchase intention (dependent variable) and number of branches, brand image, activity class, facility, staff service quality, price and demographic factors (independent variable). This present study uses quantitative research method and used data gathered from survey questionnaire from 152 respondents who are MBA students at Assumption University City Campus. The multiple linear regression is used for analyzing the statistical relationship between independent variables and dependent variable. The results of the study shows that price is the most influencing factor toward customer purchase intention in fitness center membership, followed by facility and number of branches. The management team can use this results for improving their products and services to be top of mind brand and compete in the intense competition.

*Keywords*: purchase intention, fitness center membership, Central Bangkok Area, exercise, number of branches, brand image, activity class, facility, staff service quality, price, demographic factors

#### Introduction

Health consciousness is a hot topic around the globe, and they have been for years (www.nielsen.com, 2015). The Global Burden of Disease Study in 2013 shows that around 2.1 billion people or nearly 30% of world population, were overweight. The good news is that people are trying to take care of their health. Nielsen Global Health & Wellness (2015) states that three quarters of respondents around the world are trying to lose weight plan, and 72% plan to exercise. The highest region doing physical exercise is Asia-Pacific. However, the research of Sun Life Asia Health Index 2015 shows that 94%

of the respondents know the importance of being healthy but half of them still did not exercise regularly.

Nowadays, there are numerous health and fitness clubs which provide space and equipment for workouts, together with the activity class. More than 80 billion U.S. dollars can be generated annually in global fitness and health club industry. In 2015, more than 186, 000 fitness & health clubs have been worldwide and more than 150 million people are health/fitness club members (Statistics and facts on Health & Fitness Clubs, 2015). The fitness center market in Thailand in 2015 was valued at 9,000 million baht with 10% growth which is very interesting and attracts the investors. Furthermore, the International Health Racquet & Sports Club Association (2015) said that the ratio of Thais who are the members of fitness centers is only 0.6% which is very low rate compared to the Singapore and Australia (Marketeer, 2016). The National Statistical Office of Thailand poll in 2011 shows that the top reason why Bangkok people do not work out regularly is that they have no time to exercise.

The behavior of people has changed in the recent years. They take care of themselves more. They start choosing the food that is good for their health and do exercises because the information around tries to convince educates people to take care of their health (Assawanan, 2014) The health consciousness trend of Thais gives more opportunities for fitness centers to increase in market value (Boom Fitness Center Market, The Players Accelerate Branches Expansion, 2016)

# **Literature Review**

The previous studies provide the useful information which shows the relationship between independent variables and dependent variable.

# *Number of Branches (Availability)*

Customers use various channels to search information on varieties of products offered in the market which motivate purchase decision of the customers (Nguyen & Gizaw, 2014). Paul and Rana (2012) found that product availability is the factor affecting customer purchase intention. Furthermore, Steinhart, Mazursky and Kamins (2013) stated that product availability and lack of product availability influence purchase intention.

# **Brand Image**

Brand image can drive brand equity which refers to consumer's perception and feeling toward a brand and influence consumer behavior (Zhang, 2015). In the study of Akbariyeh(2015), Shah et al.(2012) and Arslan(2014) are result in the same finding that brand image has a significant relationship with purchase intention.

# Activity Class Offered (Product Quality)

Group exercise program is one of the criteria that customers use as a basis of their decision making in choosing fitness center (Wang et al., 2008). Well-structured and supervised exercise are provided as group exercise which are the option for the people who may not interest in sport or individual activities (Ntoumania et al., 2016) In the study of Akbariyeh(2015) and Paul and Rana(2012), results showed that the quality of product is very important, also a key factor influencing customer purchase intention. Shaharudin et al.(2011) presented that positive or negative perception of the product quality can drive purchase if the expectation on products are similar among the brands

#### **Facility**

Pervaiz and Khan (2015) stated that various elements of store image influence purchase intention. Physical facilities is one of the factors that have significant impact on youths' purchase intention in Pakistan. Zhang and Li(2014) also stated that facilities are one of the factors that influence purchase intention. Furthermore, Haussain and Ali(2015) study proved that atmosphere influences purchase intention. Cleanliness, music, scent, lighting and product display/layout have significant impact to purchase intention. However, Shah et al.(2012) stated that there is negative relation between environment and purchase intention.

# Staff Service Quality

Service quality is a critical component for sport facilities. It can increase number of customers, generate competitive advantage and increase sustainable revenue (Yu, Hyun Soon, Zhang et al, 2014). The study of Arslan (2014) also shows that service quality has a significant relationship with purchase intention.

#### Price

Price is a very important factor for consumers in selecting a fitness club. The customers will compare the price and the experience they would gain (Wang, Wu & Quan, 2008). Paul and Rana(2012) found that high price is one of the reasons for not purchasing the product. Zhang and Li (2014) also stated that price is the factor that affects purchase intention. However, Akbariyeh (2015) and Arslan (2014) found the opposite result that price has no significant effect on purchase intention.

## Demographic Factors

Paul and Rana (2012) determined the demographic factors affecting purchase intention on organic food then stated that educational level and location are positively related to the quantity of organic food purchased. Other demographic factors such as gender, family members and household income are not significant. The study of Madahi and Sukati (2012), Zhang and Li (2014) and Nguyen and Gizaw (2014) also showed that demographic factors such as gender and income have positive impact to customer purchase intention.

# **Conceptual Framework**

This conceptual frame work is structured based on the previous studies from several sources. There are seven independent variables and one dependent variable in this framework. The independent variables are number of branches (availability), activity class offered (product quality), facility, which are tangible factors and brand Image, staff service quality, price, demographic factors which are intangible factors.

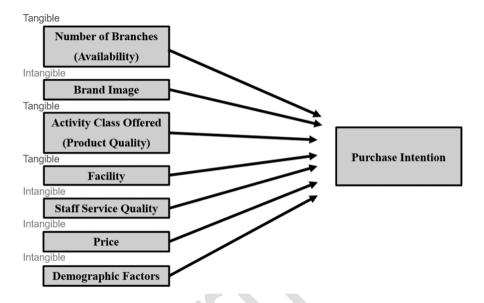


Figure 1: The conceptual framework of the study

# Hypotheses

- H1o: Number of branches has no significant relationship with customer purchase intention in fitness center membership
- H2o: Brand image has no significant relationship with customer purchase intention in fitness center membership
- H3o: Activity class has no significant relationship with customer purchase intention in fitness center membership
- H4o: Facility has no significant relationship with customer purchase intention in fitness center membership
- H5o: Staff service quality has no significant relationship with customer purchase intention in fitness center membership
- H6o: Price has no significant relationship with customer purchase intention in fitness center membership

• H7o: Demographic Factors has no significant relationship with customer purchase intention in fitness center membership

# Method of Research

The quantitative approach was utilized in this study. This study used statistical analysis program to complete the data analysis by using correlation and multiple regression.

# Target Population

The respondents of this study were the MBA students at Assumption University because the age of students is in range of fitness center target customers. Furthermore, they frequently go to Zen@Centralworld, Central Bangkok area which has three brands of fitness center in walking distance; Fitness First at Siam Paragon, TRUE Fitness at Zen@Centralworld and Virgin Active at Siam Discovery

According to the number of MBA students at Assumption University in October 2016, the total target population for this study is 250 respondents

# Sample Size

To ensure that this study is reliable, the sample size is determined by using Krejcie and Morgan table (www.kenpro.org) at confidence level 95%. The total population is 250 respondents. From the table, sample size of this study is 152 respondents

# Sampling Procedure

This research used both online and offline questionnaires due to the limited time. For online questionnaires, the researcher used Google Survey as the tools to gather the information. For offline questionnaires, the researcher distributed the questionnaires to the MBA students at Assumption University City Campus in late October to early November 2016. The sampling procedure for this study was convenience random sampling to collect the data.

#### Pretest

Pretest is a trial survey to examine reliability. The research used Cronbach's alpha coefficient to test the reliability of the questionnaires. The respondents for trial survey were randomly picked and they were 30 MBA students at Assumption University City Campus. A statistical analysis program is applied to test the reliability. The results of reliability are shown in table 1, indicating that all the questions in this questionnaire are reliable.

Table 1 Reliability of Pretest (N=30)

Variables	Number of Items	Cronbach's Alpha
Number of Branches (Availability)	4	0.748
Brand Image	4	0.691
Activity Class Offered (Product Quality)	4	0.671
Facility	4	0.672
Staff Service Quality	4	0.816
Price	4	0.668
Purchase Intention	4	0.847
All variables	28	0.906

# **Data Analysis**

This research gathered the information from 152 MBA students at Assumption University City Campus. There are 106 females (69.7%) and 46 males (30.3%). Most of the respondents are in the age group 21-28 years old which are 106 respondents (69.7%). The rest of respondents are in the age group 29-36 years old (30.3%). Furthermore, most of the respondents' income level are in range of 15,000-25,000 baht which are 50 respondents (32.9%), followed by 25,001-35,000 baht range for 44 respondents (28.9%). Moreover, the researcher asked the respondents about the fitness center brand that they would like to purchase membership. The result shows that 67 respondents (44.1%) choose Fitness First, followed by Virgin Active for 50 respondents (32.9%) and TRUE Fitness for 35 respondents (23.0%).

Table2

Gender Descriptive Analysis

Gender	Frequency	Percentage
Male	46	30.3%
Female	106	69.7%
Total	152	100.0%

Table3

Age Descriptive Analysis

Age	Frequency	Percentage
21-28 years	106	69.7%
29-36 years	46	30.3%
Total	152	100.0%

Table 4

Income Descriptive Analysis

Income	Frequency	Percentage
≤15,000 baht	3	2.00%
15,001-25,000 baht	50	32.9%
25,001-35,000 baht	44	28.9%
35,001-45,000 baht	33	21.7%
≥45,001 baht	22	14.5%
Total	152	100.0%

Table5

Chosen Fitness Center brand Descriptive Analysis

Chosen Brand	Frequency	Percentage
Fitness First	67	44.1%
TRUE Fitness	35	23.0%
Virgin Active	50	32.9%
Total	152	100.0%

# Correlation Analysis

To investigate the relationship between dependent variable and independent variables, correlation analysis method was applied for this study. Correlation analysis shows the strength of relationship between two variables which can be classified by the

value 0.00-0.19 meaning very weak relationship, 0.20-0.39 meaning weak relationship, 0.40-0.59 meaning moderate relationship, 0.60-0.79 meaning strong relationship and 0.80-1.00 meaning very strong relationship.

Table 6
Summary of Pearson's Correlation Coefficient (N=152)

Factors	Levels	Correlation Coefficient
Number of Branches	0.273**	positive weak relationship
Brand Image	0.294**	positive weak relationship
Activity Class	0.235**	positive weak relationship
Facility	0.448**	positive moderate relationship
Staff	0.462**	positive moderate relationship
Price	0.600**	positive strong relationship

<sup>\*\*</sup>Correlation is significant at 0.01 level (2-tailed).

# Hypotheses Testing

# Multiple Linear Regression Analysis

To test the hypothesis, multiple linear regression is conducted in this study. The adjusted R Square value at 0.443 indicating that 44.3% of the variation in purchase intention can be explained by number of branches, brand image, activity class, facility, staff service quality and price. Furthermore, VIF is applied to check multicollinearity problem in a set of independent variables. The result shows that there are no multicollinearity problem in this analysis

Table7

Summary of Multiple Linear Regression Analysis (N=152)

Factors	В	SE B	Beta	Sig. Value	VIF
			(β)		
Number of Branches	.162	.081	.133	.047	1.197
Brand Image	.136	.078	.113	.082	1.135
Activity Class	.093	.081	.074	.249	1.103
Facility	.298	.084	.241	.001	1.263
Staff	.023	.084	.022	.787	1.800
Price	.478	.085	.433	.000	1.610

For the significant level of independent variables, it shows that three out of six independent variables have significant relationship with customer purchase intention in fitness center membership. The most influencing factor is price, followed by facility and number of branches.

# Independent Sample T-Test

To find the significant difference among gender group and purchase intention of fitness center membership, independent sample t-test is conducted in this study. The significance level for this study is 0.05. The result shows that gender has no significant relationship with customer purchase intention in fitness center membership

# Table8

# Independent Sample T-Test

	_	Sig. Value
Purchase Intention	Equal variances assumed	.844
	Equal variances not assumed	

# One-Way Anova

To find a significant difference among age group, income range and purchase intention of fitness center brand, one-way anova is conducted in this study. The significance level for this study is 0.05. The result shows that age group and income range have no significant relationships with customer purchase intention in fitness center membership.

#### Table 9

One-way Anova (age)

1100	Sig. Value
Between Groups	.259
Within Groups	

## Table10

One-way Anova (income)

Sig. Value	
.068	

According to the result of independent sample T-Test and one-way anova, demographic factors have no significant relationship with customer purchase intention in fitness center membership.

Table11

Hypotheses Testing Summary

Hypotheses	Results
H1o: Number of branches has	
no significant influence on	
customer purchase intention in	
fitness center	Reject H1o
membership	
771 N 1 C1 1 1	
H1a: Number of branches has	
a significant influence on	
customer purchase	
intention in fitness center	
membership	
H2o: Brand image has no	
significant influence on	
customer purchase	
intention in fitness center	Failed to reject
membership	H2o
memoership	1120
H2a: Brand image has a	
significant influence on	
customer purchase	
intention in fitness center	
membership	
H3o: Activity class has no	
significant influence on	
customer purchase	
intention in fitness center	Failed to reject
membership	Н3о
H3a: Activity class has a	
significant influence on	
customer purchase	
intention in fitness center	
membership	

For the findings of hypotheses testing, there are two tangible elements and one intangible element that have significant influence on dependent variable as shown below;

- **H1a:** Number of branches (tangible) has a significant influence on customer purchase intention in fitness center membership
- **H4a:** Facility (tangible) has a significant influence on customer purchase intention in fitness center membership
- **H6a:** Price (intangible) has a significant influence on customer purchase intention in fitness center membership

#### **Discussion and Conclusions**

This study aims to determine which factors and criteria influence customer intention to purchase in fitness center membership in central Bangkok area with three brands, namely Fitness First, TRUE Fitness and Virgin Active located very closely within walking distance. To determine the factors influencing customer purchase intention, the researcher studied the previous findings then structured the conceptual framework which has seven independent variables; number of branches, brand image, activity class, facility, staff service quality, price, demographic factors and purchase intention as a dependent variable. However, the findings of this study do not support all the previous findings. The detail comparison between present study and previous findings is as follows.

# *Number of Branches (Availability)*

The result of present study shows that number of branches has a significant relationship with customer purchase intention in fitness center membership, which supports the previous findings from Paul and Rana (2012). They found that product availability is a factor affecting the customer purchase intention. Steinhart, Mazursky and Kamins (2013) also stated that product availability has a potential influence on purchase intention. Furthermore, the findings of Nguyen and Gizaw (2014) show that options available in the market encourages purchase intention as well.

# **Facility**

Facility is the second influencing independent variable having a significant relationship with customer purchase intention in fitness center membership. The previous study from several researchers also shows the same result. Pervaiz and Khan(2015) stated that physical facilities is one of the factors that has a significant impact on youths' purchase intention in Pakistan. However, the result of present research does not support Shah et al.(2012) who stated that there is negative relation between environment and purchase intention.

#### Price

Price is the independent variable that has the highest significant level in this study indicating that price is the most influencing factor on customer purchase intention in fitness center membership. This supports the findings of Zhang and Li(2014) and Wang,

Wu and Quan(2008). Furthermore, Paul and Rana(2012) found that high price is one of the reasons for not purchasing the product. However, the result of present study does not support Akbariyeh(2015) and Arslan(2014) that price has no significant effect on purchase intention.

The results of this research do not support all the previous studies because this research gathered the information in a different society and culture from the previous one. Also the respondents of this study is MBA students at Assumption University City Campus only where the criteria that influence purchase intention in fitness center membership of respondents in other areas might be different.

#### References

- Akbariyeh, H. (2015). A Study of Factors Affecting on Customers Purchase Intention. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2(1), 267-273. Retrieved October 3, 2016, from http://www.jmest.org/wp-content/uploads/JMESTN42350395.pdf
- Arslan, M. (2014). Impact of Brand Image and Service Quality on Consumer Purchase Intention: A Study of Retail Store in Pakistan. *Humanities and Social Sciences*, 4, 98-106. Retrieved October 15, 2016, from file:///C:/Users/pui/Desktop/16813-19165-1-PB (1).pdf.
- Assawanan, A. (2014). Trend of health conscious. Retrieved September 25, 2016, from http://www.bangkokbiznews.com/blog/detail/613700
- Becher, J. (2012). Why gas stations are so close to each other. Retrieved September 26, 2016, from http://www.forbes.com/sites/sap/2012/05/21/why-gas-stations-are-so-close-to-each-other/#3ed72fbf1b9c
- Bhasin, H. (2016). 5 reasons pricing strategy is increasing in importance. Retrieved October 6, 2016, from http://www.marketing91.com/pricing-strategy-increasing-importance/
- Boom Fitness Center Market, The Players Accelerate Branches expansion. (2016). Retrieved September 24, 2016, from http://positioningmag.com/1101261
- Byer, B. (2016). Difference between Fitness Centers, Gyms, and Health Clubs. Retrieved October 3, 2016, from https://caloriebee.com/gyms-classes/Difference-between-Fitness-Centers-Gyms-and-Health-Clubs
- Consumer. (2015). This year's top new year's resolution? Fitness!!

- Retrieved September 23, 2016, from http://www.nielsen.com/us/en/insights/news/2015/2015s-top-new-years-resolution-fitness.html
- Didar, M., & Gorgia, B. (2013). Advantages and disadvantages of branch bank. Retrieved October 5, 2016, from http://othesis4u.blogspot.com/2013/03/advantages-and-disadvantages-of-branch.html
- Fitness First. (n.d.). Who We Are. Retrieved November 16, 2016, from http://www.fitnessfirst.com/who-we-are/
- Fitness health 101. (n.d.). Typical Amenities to Look for at a Fitness Center. Retrieved September 29, 2016, from http://www.fitnesshealth101.com/fitness/general/centers/ amenities
- Health care asia. (2012). Asia's fitness industry getting trendier than ever... Retrieved September 23, 2016, from http://www.healthcareasia.org/2012/asias-fitness-industry-trendier-than-ever/
- Herrmann, L. K. (2012). FITNESS AND FITTING IN: AN EXPLORATORY STUDY LYNN...Retrieved October 10, 2016, from https://www.ideals.illinois.edu/bitstream/handle/2142/34301/Herrmann\_Lynn.pdf?sequence=1
- Hire staff that provide quality service. (2016). Retrieved October 16, 2016, from https://www.business.qld.gov.au/industry/tourism/service-quality-toolkit/step-4-hire-staff-that-provide-quality-service
- Hussain, R., & Ali, M. (2015). Effect of Store Atmosphere on Consumer Purchase Intention. *IJMS International Journal of Marketing Studies*, 7(2), 35-43. doi:10.5539/ijms.v7n2p35
- IHRSA. (2015). Top Health Club Markets Continue Growth. Retrieved September 23, 2016, from http://fitnessbusinesscanada.com/editorials/top-health-club-markets-continue-growth/3104
- Kenpro. (2012). Sample Size Determination Using Krejcie and Morgan Table... Retrieved October 20, 2016, from http://www.kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/
- Madahi, A., & Sukati, I. (2012). The Effect of External Factors on Purchase Intention amongst Young Generation in Malaysia. *International Business Research*, *5*(8), 153-159. doi:10.5539/ibr.v5n8p153

- Marketeer content 2. (2015). Fierce Battle of Fitness Club with health Conscious Trend of Thais. Retrieved September 26, 2016, from http://marketeer.co.th/archives/60264
- Marketeer content 2. (2016). Fitness center market. Retrieved September 24, 2016, from http://marketeer.co.th/archives/91091
- Marketeer content 2. (2016). Fitness center market: The new opportunities for the investors. Retrieved September 24, 2016, from http://marketeer.co.th/archives/91648
- Mion, E. G. (2014). Fitness Centers. Retrieved October 2, 2016, from http://wbdg.org/design/fitness\_centers.php
- Mohd, R. S., Suhardi, W. M., Anita, A. H., Maznah, W. O., & Etty, H. H. (2013). The relationship between product quality and purchase intention: The case of Malaysias national motorcycle/scooter manufacturer. *African Journal of Business Management Afr. J. Bus. Manage.*, 5(20), 8163-8176. doi:10.5897/ajbm11.267
- National statistical office. (2011). Survey on population behavior in playing sport or physical exercise and mental health 2011. Retrieved September 24, 2016, from http://service.nso.go.th/nso/nsopublish/themes/files/exerFull54.pdf
- Nguyen, T., & Gizaw, A. (2014). Factors that influence consumer purchasing decisions of Private Label Food Products. Retrieved from http://www.diva-portal.org/smash/get/diva2:705384/fulltext01.pdf
- Nokdee, C. (2016). 6 behaviors ruin officer's health. Retrieved September 24, 2016, from http://www.thaihealth.or.th/Content/30835-6
- Paul, J., & Rana, J. (2012). Consumer behavior and purchase intention for organic food. *Journal of Consumer Marketing*, 29(6), 412-422. doi:10.1108/07363761211259223
- Pervaiz, A., & Khan, M. (2015). Elements of Supermarket Image Influencing the Purchase Intentions of Youth in Pakistan. Retrieved October 6, 2016, from http://www.iiste.org/Journals/index.php/JMCR/article/viewFile/24865/25468
- Punpeng, K. (2015). Trend of exercise and the opportunity of fitness center industry.

- Retrieved November 16, 2016, from https://www.scbeic.com/th/detail/product/1347
- Shah, S. H., Aziz, J., & Jaffari, A. R. (2012). The Impact of Brands on Consumer Purchase Intentions. 105-110. Retrieved October 4, 2016, from http://www.citationmachine.net/apa/cite-a-journal/manual
- Smith, A. C. (2015). What Are the Benefits of a Fitness Center? Retrieved September 29, 2016, from http://www.livestrong.com/article/351441-what-are-the-benefits-of-a-fitness-center/
- Startupbizhub. (n.d.). Benefits of Business Expansion. Retrieved October 5, 2016, from http://www.startupbizhub.com/benefits-of-business-expansion.htm
- Statista. (2015). Health/fitness clubs Asia-Pacific countries 2015 | Statistic. Retrieved November 16, 2016, from https://www.statista.com/statistics/308861/health-club-number-in-asia-pacific-countries/
- Statista. (n.d.). Global forecast of sports, fitness & activity monitor market revenue from 2013 to 2019. Retrieved September 23, 2016, from https://www.statista.com/statistics/302572/fitness-sports-and-activity-monitor-market-revenue-worldwide/
- Statista. (n.d.). Statistics and facts on Health & Fitness Clubs. Retrieved November 16, 2016, from https://www.statista.com/topics/1141/health-and-fitness-clubs/
- Steinhart, Y., Mazursky, D., & Kamins, M. A. (2013). The process by which product availability triggers purchase. *Marketing Letters*, 24(3), 217-228. doi:10.1007/s11002-013-9227-4
- Sun Life Financial. (2015). Health-related awareness and motivation on the rise in Asia but majority still unable to convert to healthier behaviors. Retrieved September 23, 2016, from http://www3.asiainsurancereview.com/Document/sunlife asia health.pdf
- The Nielsen Company. (2015). We are what we eat. Retrieved September 23, 2016, from https://www.nielsen.com/content/dam/nielsenglobal/eu/nielseninsights/pdfs/Nielse n Global Health and Wellness Report January 2015.pdf
- True Group. (n.d.). About True Group. Retrieved September 25, 2016, from http://www.truefitness.co.th/en/about-us/

- Virgin Active. (n.d.). About Virgin Active Fitness Clubs. Retrieved September 26, 2016, from http://www.virginactive.co.th/home/our\_difference/about\_virgin\_active.aspx
- Zhang, W., & Li, Y. (2014). A Study on Consumer Behavior of Commercial Health and Fitness Club—A Case of Consumers in Liverpool. *AJIBM American Journal of Industrial and Business Management*, 04(01), 58-69. doi:10.4236/ajibm.2014.41010
- Zhang, Y. (2015). The Impact of Brand Image on Consumer Behavior: A Literature Review. *OJBM Open Journal of Business and Management*, 03(01), 58-62. doi:10.4236/ojbm.2015.31006