#### **CHAPTER 5**

#### CONCLUSION

# 5.1 INTRODUCTION

This chapter presents the summary and the conclusion of this research. It will also discuss the limitations of the research and provide some suggestions for future research. Lastly, the implications and contributions of this research towards the higher education institutions and the nation are presented.

# 5.2 SUMMARY AND CONCLUSION

#### 5.2.1 Overview of the Study

The main objective of this study is to evaluate the relationships among service quality, corporate image, student satisfaction and positive word-of-mouth based on the views of students at a young and fast growth private university in Malaysia. In details, the study intends to assess how well the service quality and the corporate image influence the student satisfaction, in turn, the effect of student satisfaction on the positive word-of-mouth. The student satisfaction is examined for its mediating effect on the relationship between the service quality and the positive word-of-mouth as well as on the relationship between the corporate image and the positive word-of-mouth.

The research framework in this study was adapted from the previous studies conducted by Mohamad and Awang (2009); Brown and Mazzarol (2009). The previous researchers had used this research framework to assess the relationships of perceived service quality, corporate image, student satisfaction and student (customer) loyalty in higher education institutions. Mohamad and Awang (2009) had conducted their study at a public university in Malaysia while Brown and Mazzarol (2009) carried out their study at an Australian higher education. In this study, the assessment was extended to a young and fast growth private university in Malaysia. The construct of student (customer) loyalty in the previous studies had been changed to positive wordof-mouth in this study. The positive word-of-mouth is part of the criteria of student (customer) loyalty and behavioral intentions (Nguyen and LeBlanc, 2001).

In Malaysia, not many studies have conducted to identify the relationship among service quality, corporate image, student satisfaction and positive word-of-mouth at higher education institutions. Probably, it was because students were rarely considered as customers. So, the examination of service quality and corporate image at educational institution has been neglected. Nowadays, higher education has been viewed as an important global business.

In Malaysia, higher education business is growing rapidly and has brought a huge impact to the country's economy. The constant changes of global trends and cultures have transformed the educational business to be more serviceoriented, whereby the premier of service quality and corporate image are taken into account in order for educational institutions to compete internationally. In addition, the change of marketplace and global trend of business makes students who pay high fees, especially at private higher education institutions, expect to receive better service and product quality from providers. The students always hope that their feedback or concerns are attended to and taken into account for continuous improvement (Dagger and Sweeney, 2007; Rinehart, 1993). In view of the fact that no research has been undertaken on a young and fast growing private university thus this study takes the initiative to study the relationships and mediating effects at one of the private universities in Malaysia.

All the measurements of the constructs in this study were adapted from the previous studies and they were reported to be reliable and valid in the previous studies. A total of 48 items with close-ended questions were used to capture feedback from students for the four constructs (service quality, corporate image, student satisfaction and positive word-of-mouth) used in this study. All items were weighted with a ten-point Likert scale where 1 = strongly disagree/extremely poor/very dissatisfied/not at all likely whereas 10 = strongly agree/ extremely good/ very satisfied/ extremely likely.

A 4-page questionnaire was developed and used as a research instrument in this study. The questionnaire was divided into five parts. Part A consists of 22 questions to examine the perception of the service quality; part B was designed with 18 questions to examine the perception of the corporate image; part C was developed with six (6) questions to rate the perception of overall service quality, overall corporate image, overall satisfaction and three (3) questions out of six (6) questions were to assess the positive word-of-mouth; part D has two (2) questions which were added solely as for additional reference. They are: (1) what most heavily influences the student decision to

study in this university; and (2) from where the student came to know about the university before joining the university. Part E was designed with eight (8) demographic questions to compile the statistic of respondents.

The method of sampling was based on stratified sampling according to the campus and proportional allocation based on the total number of students in each campus. The sample size needed was 400. This sample size was chosen to ensure that the sample could represent to the population of the university. The copies of survey questionnaire were distributed through blast emails (softcopy) to all the students and to the students during classes (hardcopy). With the assistance and cooperation from the faculty staff of the private university, the responses to the study were overwhelming with a total 600 usable and valid replies obtained. The majority of the students of this university were Chinese. Therefore, the ratio of ethnicity for Chinese: Malay: Indian: Others were 94.7: 0.5: 4.7: 0.2.

All the usable and valid data were analysed using the Statistical Package for Social Sciences (SPSS) Version 16 program. The analyses involved four sections. Firstly, descriptive statistics was used to present the demographics characteristics of respondents. Secondly, reliability assessment was made where Cronbach's alpha test was undertaken to examine the internal consistency validation of each scale. Thirdly, Correlation analysis was used to assess the strength and direction of the relationship between the variables: service quality, corporate image, student satisfaction and positive word-ofmouth. Lastly, multiple regression was adopted to evaluate the significance of

the mediator, student satisfaction, in this research framework.

#### 5.2.2 Major Findings

#### 5.2.2a Descriptive Statistics of the Respondents

With descriptive statistics, the study shows that the majority respondents were Chinese, female undergraduate students between the 20 to 22 years old. They were in year 1 to year 3 of the studies in the university whereby some of these students had been started at the foundation level and subsequently furthering their studies to degree level. On the education level of their parents, the data collected show that 66.7% graduated from high school and 36.0% had a monthly income below RM2000.

# 5.2.2b Reliability Assessment

Cronbach's alpha was undertaken to assess the internal consistency and reliability of the variables (Sekaran, 2003). The acceptable value range of Cronbach's alpha is from 0 to 1 where the higher value representing higher reliability (Pallant, J., 2007). The highest Cronbach alpha value of this study is 0.95 for total service quality, followed by positive word-of-mouth (0.93), corporate image (0.90). Meanwhile, the alpha values for each of the five dimensions of service quality are as follows: reliability (0.85), empathy (0.84), assurance (0.83), and the lowest alpha values are at 0.78 for both of the responsiveness and tangibles. According to DeVellis (2003) and Nunnally (1978), alpha values for all measured variables in the previous studies were more or less the same, which are within an acceptable range of 0.7 and more. That means all the questionnaire scales in this study have good internal

consistency reliability.

# 5.2.2c Correlation Assessment

The outcome of the correlation analysis found that service quality directly and positively correlated to customer satisfaction (r=0.829, p<0.01). This finding is supported by the findings of previous research (Ham 2003) where the service quality construct was adopted for this study. In addition, the results of this study were also supported by many past researches such as Ostrom and lacobucci (1995); Gronroos (1988); Paul and Olson (1987); Spreng and Mckoy (1996); Kuo and Ye (2009); Mohamad and Awang (2009).

This study found that corporate image directly and positively influenced student satisfaction (r=0.736, p<0.01). This means that the corporate image for a higher education institution is vital. The more prominent corporate image is, the higher the student satisfaction will be. The results obtained have provided evidence to support the consistent findings of previous studies conducted by Ostrom and Iacobucci (1995); Gronroos, 1988; Paul and Olson (1987); Kuo and Ye (2009); Mohamad and Awang (2009); Helena and Mário (2010); Brown and Mazzarol (2009).

In this study, the results show that the student satisfaction had directly and positively influenced the positive word-of-mouth (r=0.826, p<0.01). This confirms and supports the consistency outcomes of the several previous research studies undertaken by Cuthbert (1996); Hennig-Thurau et al., (2001); Susskind (2002); Ranaweera and Prabhu (2003).

#### 5.2.2d Multiple Regression Assessment

#### (i) Five Dimensions of Service Quality

Multiple regression analysis was used to indentify the most influence dimension of service quality on student satisfaction. The purpose to determine the most influence dimension of service quality is to narrow down the focus on service encounter as compared to the previous studies. From this study, the findings reveal that all the five dimensions are shown 53.0% (F=133.929, p= 0.000) of the variance in student satisfaction, which explain significant predictors. The standardized betas of the regression coefficients for tangible (0.259) is the most influence dimension to student satisfaction, followed by empathy (0.208), responsive (0.160), assurance (0.120), whereas reliability (0.089) is the lowest effect to student satisfaction than other four dimensions.

# (ii) Hypotheses Testing

Five hypotheses were proposed in this study. All of them were tested with Multiple Regression. The following is a summary of the hypotheses testing of this study.

# H1: Service quality positively influences student satisfaction and H2: Corporate image positively influences student satisfaction.

Both independent variables (service quality and corporate image) are given 70.1% (F = 699.091, p = 0.000) of the variance in student satisfaction, which are significant predictors. The regression coefficients of both independent variables show that they have significant effect (p < 0.01) on the mediator of student satisfaction. In sum, H1 and H2 have pointed out that the service

quality and corporate image positively affected customer satisfaction in higher education institution.

The findings of this test also show that the service quality (0.672) with the higher regression coefficient is the stronger influencing factor on the student satisfaction as compared to the corporate image (0.195).

This finding of H1 in this study is supported by the findings of previous research (Ham 2003) where the service quality construct was adopted for this study. The results were also supported by many past researches such as Ostrom and Iacobucci (1995); Gronroos (1988); Paul and Olson (1987); Spreng and Mckoy (1996); Kuo and Ye (2009); Mohamad and Awang (2009).

The finding of H2 obtained in this study has provided evidence to support the consistent findings of previous studies conducted by Ostrom and Iacobucci (1995); Gronroos, 1988; Paul and Olson (1987); Kuo and Ye (2009); Mohamad and Awang (2009); Helena and Mário (2010); Brown and Mazzarol (2009).

# H3: Student satisfaction positively influences positive word-of-mouth.

The student satisfaction explains 68.2% (F = 1281.777, p = 0.000) of the variance in positive word-of-mouth, which is a significant predictor. The regression coefficient of student satisfaction shows a significant effect (p < 0.01) on positive word-of-mouth. Hence, H3 is supported in this study. The finding confirms and supports the consistency outcomes of the several

previous research studies undertaken by Cuthbert (1996); Hennig-Thurau et al., (2001); Susskind (2002); Ranaweera and Prabhu (2003). All these studies found that customer satisfaction was an antecedent of positive word-of-mouth in service oriented industry including higher education institutions.

# H4a and H4b: The mediating effect of student satisfaction on the relationship between service quality and corporate image to positive word-of-mouth

In this study, the mediator (student satisfaction) was tested using multiple regression analysis. They were used to explain the customer satisfaction's role as a mediator in the relationship between service quality and corporate image to positive word-of-mouth. To establish mediation, the relationship of the variables must be fulfilled the four conditions as advocated by Baron and Kenny (1986); MacKinnon, et al. (2002); G. Pierce (2003); Grayson N. Holmbeck (2006); David Howell (2006).

In this study, all the four conditions tests were conducted using multiple regression analysis and yielded positive results. Condition 1: the service quality and corporate image significantly influences the positive word-of-mouth ( $R^2 = 0.589$ , p<0.01); condition 2: the service quality and corporate image significantly influences the student satisfaction ( $R^2 = 0.701$ , p<0.01); condition 3: the student satisfaction significantly influences positive word-of-mouth with the predictor accounted for ( $R^2 = 0.702$ , p<0.01); condition 4: the condition 1 and 3 are fulfilled, and the addition of student satisfaction as a mediator in condition 3 reduces the relation between the service quality and

corporate image to positive word-of-mouth in condition 1 is revealed where the Beta values for service quality (0.193) and corporate image (0.203) in step 3 are less than Beta values for service quality (0.759) and corporate image (0.397) in step 1. Hence, it has given the evidence of a moderate mediation between the independent variables (service quality and corporate image) and the dependant variable (positive word-of-mouth). In sum, service quality and corporate image do influence the student satisfaction which in turn will influence the positive word-of-mouth. As a conclusion, the multiple regression results provide a support for the mediation hypothesis, H4a and H4b. This research finding corroborated the findings of the previous studies by Ostrom and lacobucci (1995); Gronroos, (1988); Paul and Olson (1987); Nguyen and LeBlanc (2001); Mohamad and Awang (2009); Kuo and Ye (2009); Brown and Mazzarol (2009) on the mediating effect of the student satisfaction. The hypotheses results are summarised in the Table 5.1 as below:

H1	Service quality positively influences student satisfaction.	Multiple Regression	Supported
H2	Corporate image positively influences student satisfaction.	Multiple Regression	Supported
H3	Student satisfaction positively influences positive word-of-mouth.	Multiple Regression	Supported
H4a	Student satisfaction significantly mediates the relationship between service quality and positive word-of-mouth.	Multiple Regression	Supported
H4b	Student satisfaction significantly mediates the relationship between corporate image and positive word-of-mouth	Multiple Regression	Supported

Table 5.1 Summary of Hypotheses Tests

# 5.2.3 Conclusion

The relationships among service quality, corporate image, student satisfaction and positive word-of-mouth in a young and fast growing private university have been investigated and tested. The findings showed that the service quality and the corporate image had significantly influenced the student satisfaction, in turn, influenced their positive word-of-mouth. In addition, this study also provided evidence that the student satisfaction was a mediator between the service quality, corporate image and positive word-of-mouth.

This study gives useful inputs and awareness to the higher education institutions that they must not neglect the importance of student satisfaction by improving the service quality and enhancing their corporate image. The perception of good service quality and corporate image directly and positively influences the students' satisfaction and subsequently affects to their positive word-of-mouth. All these relationships are imperative factors that bring strong impact to an institution in order for an institution to achieve, sustain, upgrade and leverage on its competitive advantages especially in this competitive business era.

In conclusion, all the research objectives of this study have been fulfilled. The study reminds higher education institutions that they can increase their student satisfaction by reviewing their existing service quality and corporate image and improving them from time to time. For this will eventually increases the positive word-of-mouth from their students. It is unlikely that an institution will receive the benefits of positive word-of-mouth from students who are not satisfied with their service and programmes. Again, the positive word-of-mouth is crucial for institutions to retain their students and also to attract new students.

# 5.3 LIMITATIONS OF THE STUDY

Despite the fact that this study has completely investigated and achieved all the proposed research objectives as well as providing useful inputs to higher education institutions, but it has limitations.

The first limitation of the study is that it focused only on one private university in Malaysia. The results may vary between different geographical or other higher education institutions. Future research may be extended to more private universities in Malaysia so that data collected will be big enough to represent the total population of private higher education institutions in Malaysia.

The second limitation of the study is that it did not include the constructs such as the perceived value, the expectation of service quality and the expectation of corporate image of the institution to have deeper understanding and to enhance the evidence for the study.

The third limitation is that, it did not consider the responses from university staff to explore the gap of students' views and university staff's views.

The fourth limitation is that, the survey could have included qualitative data from interviewing the university staff or students. It could explore more inputs for triangulation to strengthen the findings of the study.

Fifth, the survey could be extended to compare the relationship of variables in

public universities and private universities in Malaysia.

# 5.4 SUGGESTIONS FOR FUTURE RESEARCH

The study can be further enhanced by analyzing perceived service quality and corporate image differences by the demographic factors such as student past experience, gender, family income and parent's educational level. According to the previous research conducted by Parasuraman, Zeithaml and Berry (1993), Webster (1989), Wells and Prensky (1996), demographics had salient factor in affecting interactions between variables.

Future research is recommended to replicate the model of this study to examine on other private higher education institutions, to compare long established and young higher education institutions, to compare the higher education institutions in different geographical, etc. The outcomes of such research could vary across the cultures and states on the different timescale.

The model of this study can also be replicated by adding additional constructs such as perceived value, the expectation of service quality and the expectation of corporate image to diversify its study areas. The additional constructs may give a vary outcomes which the previous studies may be lacking of. It will provide the deeper understanding and explanation for the service industry of education.

Future studies can obtain more inputs by using qualitative method to collect additional feedback that cannot be collected with an close-ended questionnaire. Future research could consider involving the university or college staff to solicit their views compared theirs with the students' feedback in order to determine the attributes to optimize for continuous improvement.

# 5.5 IMPLICATIONS

With the growing number of higher education institutions in Malaysia, competition in the education industry in the country becomes very keen. The dramatically changes of the trend and culture from subsidy by government through grants to user paying system have transformed the education industry to be more service-oriented and this has dramatically changed the student behaviours (King, 2001). The students now view themselves as customers (Jackson, 2002; Tandukar, 2007). This happens especially in the private higher education institutions. This study has implication to a new private and also long establishes private higher education institutions. This study has provided better understanding on the perceived service quality and corporate image of the university students which bring impact to student satisfaction and eventually to positive word-of-mouth. In this competitive market driven environment, it is important to understand the factors influencing student perceptions of the university or college in order to meet the students' needs and retain them and at the same attract new students.

The findings of the study have several implications for the academic and administrative staff from the lower ranking until senior official of an institution that can be taken note, especially on the influence of perceived service quality and corporate image to student satisfaction and the impact of student

satisfaction on the positive word-of-mouth. The first implication of this study is the influence of service quality on the student satisfaction. The results of the study were consistent with the findings of previous studies undertaken by Ostrom and Iacobucci (1995); Gronroos (1988); Paul and Olson (1987); Spreng and Mckoy (1996); Kuo and Ye (2009); Mohamad and Awang (2009). Hence, this study has provided a more supporting data for academic and administrative staff in Malaysian private universities to take note of the need to improve service quality by emphasising the fundamental attributes of five dimensions in the following section.

On the tangible dimension of service quality, the university should pay attention to the tangible and visible aspects of the university (Zeithaml, Parasuraman and Berry, 1990) such as neat and professional appearance of employees, modern classroom facilities and equipment, convenient business hours and secured transactions in the university environment (Ham, 2003). The satisfaction level of students will increase if they can see that the tangibles of service quality are met.

On the reliability dimension of service quality, the level of independence and accurateness of the administrative and academic staff in performing their daily tasks should be taken note of, according to Zeithaml, Parasuraman and Berry (1990). The university staff should try to understand the needs of the students achieve the reliability dimension of service quality. The services provided must be timely. Prompt service is vital to a student. Furthermore, when a student seeks for assistance and it should be provided in a consistently courteous and

caring fashion (Ham, 2003). All of these could build the confidence of students towards a university's service and increase the student satisfaction, which ultimately creates positive word-of-mouth to retain the students and attract new students.

The responsiveness dimension of service quality refers to the willingness for university staff to assist students and give prompt advice and service when the students need helps (Zeithaml, Parasuraman and Berry, 1990). This is emphasis to have visually appealing materials associated with the service, have the student's best interest at heart and have staff that is willing to help students as well as try the best to maintain error-free records. Therefore, the frontline staff should be more responsive to the student's request by taking the student's best interest at heart and willingly offer help to the student when necessary (Ham, 2003). This means that the university academic and administrative staff should be aware that their roles are not only limited in the office but at the every single corner of the areas within the university. By offering fast service, a university can enhance the satisfaction of students which in turn, can increase their positive word-of-mouth.

For the dimension of assurance in service quality, university staff should be able to demonstrate competency, courtesy, credibility and security, and the possession of certain level of knowledge by lecturers to instill trust and confidence (Kuo and Ye, 2009). Therefore, the university staff must always keep students informed about when services will be performed, provide services as promised, instill confidence in students and have the knowledge

to answer students' questions (Ham, 2003). The frontline staff should undergo training and be made aware of the importance and impact of assurance on student satisfaction. A well-trained and experienced staff with friendly and approachable attitude can make the students feel satisfied with the services provided

The last dimension of service quality is empathy, the care and individualized attention given by the university staff to each student (Zeithaml, Parasuraman and Berry, 1990). A university with a dependable system to handle students' service problems will always be ready to respond to students' request and give students individual attention. The university always provides services right the first time and has visually appealing classrooms and campus. These all are to individual attention and personalized service needed in building up a long-term relationship with students (Ham, 2003). The staff of a university should show their care and concern by attending to the physical and emotional needs of their students.

The second implication relates to the significant relationship between corporate image and customer satisfaction. Apart from service quality, the findings of this study have pointed out that corporate image is also a key contributor in the formation of customer satisfaction (Helena and Mário, 2010; Mohamad and Awang, 2009; Kuo and Ye, 2009; Brown and Mazzarol, 2009). The scale of corporate image used in this study included how the university was viewed by the students-whether it was friendly, supportive, innovative and student focused, and whether it was offering a wide range of courses, had

intake that was flexible, had study programmes that were job oriented, whether the university was considered as long-established, modern in approach and highly prestigious (Brown and Mazzarol, 2009). University staff should attempt to monitor and improve the attributes of corporate image in order to sustain and leverage their university's competitive advantages in education industry. A prominent image could increase student satisfaction and is one of the effective ways to secure long-term relationships with students.

Similar to other service industries, the higher education industry should also take positive word of mouth into account where it has been proven to be of great impact to the success of an organisation in a competitive business environment. Potential students facing uncertainty selecting a service or a product because of having difficulty evaluating would rather refer to their friends or relatives at the University for opinions and suggestions. Therefore, positive word-of-mouth is a significant factor in reducing pre-purchase doubt and uncertainty during purchase decision making (Webster, 1988; Hugstead, Taylor and Bruce, 1987). Moreover, positive word-of-mouth is also a criterion of the willingness for the current students to pay more or to pay for additional services if they wish to pursue postgraduate study or attend short courses for lifelong learning (Zeithaml et al., 1996).

# 5.6 CONTRIBUTIONS OF THIS STUDY

The contribution of this study is on the development of a research framework to collect the views of students in a young and fast growing private university in Malaysia. A number of researches had been conducted to study the

education industry where student was viewed as a customer in other countries but not in Malaysia. However, in Malaysia, student is still not really considered under as such category by giving the better service and product qualities as students' needs and required. Therefore, this study takes the initiative to investigate the relationship among service quality, corporate image, customer satisfaction and positive word-of-mouth in a private higher education institution in Malaysia.

In sum, the findings found that both the constructs of superior service quality and prominent corporate image were extremely vital and were an antecedent of customer satisfaction which in turn influenced positive word-of-mouth in a higher education institution. This study therefore proposes that measuring the perceived service quality and corporate image is an important evaluation to increase the student satisfaction in order to remain the competitiveness for the university. The findings of this study have also demonstrated that university staff should improve service quality by emphasising on the underlying dimensions of service quality: tangible, reliability, responsiveness, assurance and empathy. Customer satisfaction is a significant mediator of the relationship among service quality and corporate image and positive word-ofmouth. Hence, various service quality and corporate image assessment tools should be established to monitor the service quality and corporate image throughout the university from time to time for continuous improvement.