

## **DISCRETIONARY COLLABORATIVE BEHAVIOUR (DCB) OF STUDENTS FROM INSTITUTES OF HIGHER LEARNING IN MALAYSIA**

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### **ABSTRACT**

*It is generally accepted that a graduate who is satisfied with the quality of his or her educational experience is likely to reciprocate by performing certain behaviours that benefit the alma mater. Whether or not this reciprocating behaviour is consistent across all individuals, however, is much less clear. The present study addresses this question using the Satisfaction with Life Scale (SWLS) to measure life satisfaction. Three components of intended discretionary collaborative behaviours (IDCB) – institutional support, word-of-mouth, and financial contributions – were extracted from factor analysis. Using data from 167 usable responses to a mail and e-mail survey of 1,500 MBA graduates, we find that for low levels of life satisfaction, the impact of overall student satisfaction (OSS) on the components of IDCB was either negligible or negative. However, for high levels of life satisfaction, the impact was generally in a positive direction, and a moderate level of OSS was already sufficient for the graduates to perform intended discretionary services in terms of word-of-mouth and financial contributions. Taken together, the outcomes of this study may offer preliminary support that, even though the occurrence of student dissatisfaction with overall services is known to reduce the likelihood of IDCBs, it is possible that high levels of life satisfaction may serve as support against the non-performance of IDCBs.*

**Keywords:** overall student satisfaction, behavioural intentions, life satisfaction, discretionary collaborative behaviour, intended discretionary collaborative behaviour

### **INTRODUCTION**

Higher education has changed significantly in the past two decades. In Malaysia, the education landscape has been changed and is still being changed by a number of factors and events. First, the constraints imposed upon government allocations, and their consequent reductions in this sector have led to greater liberalisation in education. This is illustrated, for example, by the introduction of the Higher

Education Act of 1995, which allows for the establishment of private higher education institutions. The combined effect of growing demand for tertiary level education and more intense competition between tertiary level education institutions has created a greater awareness among education providers of the need to provide services that satisfy their graduates for their continued profitability and survival. The continued reduction in budgetary support from the government has had a similar effect on the public higher education institutions.

Second, the rising costs in education, accompanied by declining performance and productivity, indicate a need for change to create higher education institutions that are more responsive to student needs, i.e., that will maximise the provision of services to students, and hence student satisfaction, while minimising costs to the institutions (Elliott & Shin, 2002; Havranek & Brodwin, 1998). In the higher education sector, the consequences of unmanageable levels of dissatisfaction or of the failure to adequately reduce dissonance may cause lower levels of student satisfaction and achievement and a higher rate of attrition (Wiese, 1994). Furthermore, behavioural intentions (BI), which have been given considerable attention in the literature, have been found to be positively impacted by OSS. Whether this impact is uniform across all individuals, however, is much less clear. Since individuals are known to vary by various psychological attributes, it is important and critical that other life issues be taken into more detailed consideration when the OSS-BI relationship is examined.

One of the life issues that should be considered in relation to BIs is an individual's life satisfaction, which refers to his or her self-assessment of his or her current quality of life (Day, 1987). Although numerous studies have been conducted to examine the life satisfaction construct in the educational settings (e.g., Berkel & Constantine, 2005; Chow, 2005; Huebner, Valois, Paxton, & Drane, 2005), most researchers have not related student life satisfaction to specific behavioural responses to service satisfaction. We believe that this construct is particularly relevant, as the pursuit of education (particularly at postgraduate level) can often be emotionally draining. Furthermore, with the growing popularity life-long learning, this issue becomes even more critical. In a qualitative study, Fournier and Mick (1999) found that overall product/service satisfaction is invariably intertwined with life satisfaction. As noted by Suldo and Huebner (2004), a positive life satisfaction reflects a tendency to experience life in satisfying ways. Hence, different levels of life satisfaction would very likely impact other behavioural responses as well. It is thus necessary to look at life satisfaction when studying the impact of OSS on BI.

This paper investigates the relationships between OSS and BI, with particular attention being paid to the moderating effect of life satisfaction on this relationship. These relationships are examined in postgraduate education

programmes, focusing particularly on campus-based MBA programmes. MBA programmes were chosen since the MBA programmes offered in this country, both by private institutions (with foreign affiliations) and by public institutions, are relatively homogeneous in nature and thus provide a natural control for other potential variables effects. Besides, MBA graduates are generally mature working individuals who are generally in a position to exhibit intended discretionary behaviours. More importantly, the life satisfaction construct is adopted in the present study, which will contribute to the body of knowledge on whether segmentation based on life satisfaction should be taken into consideration in studies involving OSS and BI.

## **CONCEPTUAL BACKGROUND**

Subjective well-being is important as a psychological summary of the quality of an individual's life in society (Andrew & Robinson, 1991). It may involve an assessment of global well-being, or it may also refer to specific life concerns and domains, such as one's job, housing, family, or income. Although the overall literature indicates that research in this area is extensive and broad-ranging, marketing as a professional discipline has contributed little in regard to its linkage with life satisfaction (Samli, 1987). The conceptualisation offered by this study predicts that the OSS will influence BI, with the impact being moderated by life satisfaction. To assess the ability of life satisfaction to function as a moderating variable in predictions of discretionary collaborative behaviours (DCB), we offer the following discussion, which develops the rationale of this investigation.

Social interest has been conceptualised as an important contributor to an individual's satisfaction with his or her life (Gilman, 2001). It involves a sense of belongingness, whereby an individual relinquishes his or her personal desires in exchange for a social commitment to others (Magen & Aharoni, 1991). Individuals who are concerned about the welfare of others tend to be better liked and accepted than those with more selfish tendencies. Conversely, those with little concern for others are assumed to have problems with work, friendship, and family, which ultimately lead to difficulties in adjusting to negative life events (Crandall, 1991). In other words, people who are highly satisfied with their lives are more predisposed to experiencing positive emotions than those who are not (Oishi & Diener, 2001).

The aforementioned premise may signal that people who are highly satisfied with life are more likely to manifest more discretionary behaviours because they are already amply rewarded in most aspects in their lives, such as themselves, families, and work lives. Also, they may not expect reciprocity when they

perform discretionary behaviours compared to those who are less satisfied with life. In relation to our study, it would be expected that MBA graduates with higher levels of life satisfaction would be more willing to perform collaborative behaviours in response to service satisfaction, whereas graduates with lower levels of life satisfaction would be much less likely to do so. Accordingly, it would be expected that MBA graduates with higher levels of life satisfaction would be more willing to perform collaborative behaviours in response to OSS, whereas graduates with lower levels of life satisfaction would be much less willing. Based on these discussions, this study posits that:

- H: The impact of OSS on BI is greater for MBA graduates who have higher levels of life satisfaction than those with lower levels of life satisfaction.

## **RESEARCH METHODOLOGY**

### **Sample**

The population of this study consisted entirely of MBA graduates in public and private higher education institutions in Malaysia. To ensure homogeneity, we included only graduates from campus-based MBA programmes. A total of 1,500 respondents were selected randomly from MBA programmes in Malaysia. A stratified random sampling was chosen for the present study to ensure adequate representations from both sectors. As the respondents are geographically dispersed, the survey questionnaires were sent to the respondents through postal mail and e-mail. To improve the response rate, follow-up telephone calls were made to the respondents who had provided their contact numbers; according to Lam, Malaney and Oteri (1990), the response rate for those respondents receiving the follow-up telephone calls was significantly higher than that of those who did not. For respondents who gave their e-mail addresses, follow-up e-mails were also sent to them. As noted by Nooraie (2001), a multiple-stage method of questionnaire administration was necessary in the interest of time and convenience of the respondents. Out of 202 questionnaires received, only 167 were usable for data analysis. The profile of the respondents (MBA graduates) is depicted in Table 1. In terms of respondents' nationality, there is a greater representation of Malaysian MBA graduates (95.8%). This is viewed as being reflective of the accessibility to respondents. The sample shows that there were more male MBA graduates (52.1%), married respondents (64.7%) and part-timers (73.7%). Approximately 62% of the MBA graduates attended public educational institutions.

Table 1  
*Profile of respondents.*

Demographic variables	Frequency	Percentage (%)
Gender		
Male	87	52.1
Female	80	47.9
Marital status		
Married	108	64.7
Single	53	31.7
Other	6	3.6
Nationality		
Malaysian	160	95.8
Non-Malaysian	7	4.2
Type of institution		
Public	103	61.7
Private	64	38.3
Enrolment status		
Full-time	44	26.3
Part-time	123	73.7

## Measurement

In general, the measures employed in this study were modified from previous studies in order to reflect local conditions. The instrument used to measure OSS was adapted from a study by Lee, Lee and Yoo (2000) and is comprised of three items. The respondents were asked to rate their satisfaction levels with the programme, institution and services on a 5-point Likert scale (1 = "Strongly Disagree" to 5 = "Strongly Agree" for the first item), (1 = "Very Dissatisfied" to 5 = "Very Satisfied" for the second item), and (1 = "Very Bad" to 5 = "Very Good" for the third item). The Cronbach  $\alpha$  for OSS was .88, providing evidence of reliability. Subsequently, the average score was used to aggregate these three items to indicate the level of OSS. Heckman and Guskey's (1998) works were adapted to measure BIs, IDCB (15 items). The respondents were asked to rate, on a 5-point Likert scale (1 = "Most Impossible" to 5 = "Most Possible"), the possibility of them performing a list of 15 behaviours. The resulting factors and their reliabilities are shown in Table 2. Several items had to be deleted and maintained due to cross-loading, leaving nine items with three factors extracted. The average scores of the items were calculated for subsequent analysis.

Table 2  
Factor and reliability analyses on IDCBs.

	Components			Cronbach $\alpha$
	1	2	3	
<b>Factor 1: IDCB – Institutional Support</b>				<b>.81</b>
Assist the Admissions Office in student recruiting	<b>.74</b>	.12	.23	
Member of an Advisory Board	<b>.81</b>	.20	.09	
Serve on the university Alumni Board of Governors	<b>.75</b>	.18	.17	
<b>Factor 2: IDCB – Word-of-Mouth</b>				<b>.89</b>
Verbally support the university to others	.09	<b>.86</b>	.30	
Encourage friends or children of friends to attend the university	.15	<b>.83</b>	.35	
Praise the university to others in a social setting	.20	<b>.72</b>	.42	
Spoke to prospective(s) about the university	.28	<b>.66</b>	.26	
<b>Factor 3: IDCB – Financial Contributions</b>				<b>.88</b>
Contribute money to the university	.13	.35	<b>.78</b>	
Assist in capital campaign activities	.21	.25	<b>.82</b>	
Eigenvalues	6.99	1.78	1.22	
Percentage variance explained (%)	46.57	11.85	8.15	
KMO	: .88			
Approx. Chi-square: 1556.33 (p < .01)				

The SWLS used in this study was based on the works of Diener (1984) and Diener, Emmons, Larsen and Griffins (1983). It consists of five items designed to measure global life satisfaction. Sample items include *"In most ways, my life is close to my ideal,"* and *"So far, I have achieved important things I want in life."* The respondents were asked to indicate their levels of agreement with the statements on a 5-point Likert scale (1 = *"Disagree Strongly"* to 5 = *"Agree Strongly"*). The scale proved to be uni-dimensional (Table 3) with a Cronbach  $\alpha$  reliability value of .87.

## RESULTS

The hypothesis positing a moderating influence of life satisfaction on the relationship between OSS and the various dimensions of IDCB was tested using a three-stage hierarchical multiple regression analysis; the results are summarised in Table 4. On the whole, the F change values indicated that, at the 5%

Table 3  
Factor analysis for life satisfaction.

Items for life satisfaction	Factor loading <i>I</i>	Cronbach $\alpha$
In most ways, my life is close to my ideal	<b>.86</b>	<b>.87</b>
The conditions of my life are excellent	<b>.83</b>	
I am satisfied with my life	<b>.82</b>	
So far, I have achieved important things I want in life	<b>.84</b>	
If I could live my life over, I would change almost nothing	<b>.69</b>	
Eigenvalues	3.286	
Percentage variance explained (%)	65.71	
Total variances (%):	65.71	
KMO	: .84	
Approx. <i>Chi-square</i> :	397.77	

significance level, life satisfaction interacted with the OSS to modify the form of the relationship between the components of IDCB and OSS. Further analysis was conducted to examine the moderator effect in the form of the relationship between OSS and life satisfaction, and IDCB-institution support, IDCB-word-of-mouth, and IDCB-financial contributions dimensions. To reveal this nature, Stewart and Barrick (2000) suggest that the respective interactions be plotted graphically. The independent variables were classified into three categories (low, moderate, and high level) by using the percentiles, 33% and 66%. Additionally, the moderator variable was categorised into two categories (low and high level) around the median. Then, the independent variable and moderator variable were recoded into different variables. Finally, a multiple line graph was plotted to illustrate the moderator effect. According to Gravetter and Wallnau (2000), the lines need not necessarily intersect as long as they are non-parallel. On the whole, three questions needed to be addressed in the analysis of the moderating effects: (1) Is there an interaction effect in the tested hypothesis? (2) If so, what is the strength of that effect? (3) If there is an effect, what is the nature of that effect? (Jaccard, Turrisi, & Wan, 1990).

The results of this analysis are displayed in Figures 1, 2 and 3. The  $R^2$  values in Table 4 indicate that the combination of OSS and life satisfaction is better able to explain the variance in IDCB-word-of-mouth (22%) than the variance in IDCB-institutional support (6%) and -financial contributions (9%). The different values of  $R^2$  suggest, however, that life satisfaction has the largest moderating influence on the relationship between OSS and IDCB-financial contributions.

Table 4  
*Hierarchical regression results of the moderating influence of life satisfaction.*

Dependent variables	Moderator: Life Satisfaction		
	Institutional support	Word-of-mouth	Financial contributions
	Beta ( $\beta$ ) +	Beta ( $\beta$ )	Beta ( $\beta$ )
OSS	-.53	-.13	-.95***
Life Satisfaction	-.77**	-.80**	-.90**
OSS x Life Satisfaction	1.29**	1.13**	1.80***
R <sup>2</sup>	.06	.22	.09
R <sup>2</sup> change#	.03	.02	.06
Sig. F change#	.02	.03	.00

Notes:

+ standardised coefficients in the third model of the hierarchical regression

# refers to the change in R<sup>2</sup> upon inclusion of the interaction terms

\* p-value < .1; \*\* p-value < .05; \*\*\* p-value < .01

Figure 1 illustrates that, for low levels of life satisfaction, the impact of OSS on IDCB-institution was negative at the low to moderate levels of OSS. It was negligible when OSS was at the moderate to high levels. However, for high levels of life satisfaction, moving from low to high levels of OSS, the impact of OSS on the IDCB-institution support was positive. Figure 1 also shows that, at low levels of OSS (dissatisfaction with the overall service), the people with low satisfaction with life are more likely to perform IDCB-institutional support, whereas the reverse is true when OSS is at high level. In summary, one can say that satisfaction with service encourages institution support discretionary behaviour only amongst those who are satisfied with their life.

Figure 2 illustrates that for low levels of life satisfaction, the impact of OSS on IDCB-word-of-mouth was negligible. For high levels of life satisfaction, the impact of OSS was found to positively impact the IDCB-word-of-mouth moving from low to moderate levels of OSS. Beyond the moderate level of overall satisfaction, the impact of OSS on IDCB-word-of-mouth was negligible. Thus one can conclude that satisfaction with the service encourages word-of-mouth discretionary behaviour only amongst alumni who are satisfied with their life; even then, the impact is limited to a moderate level of satisfaction with the service.



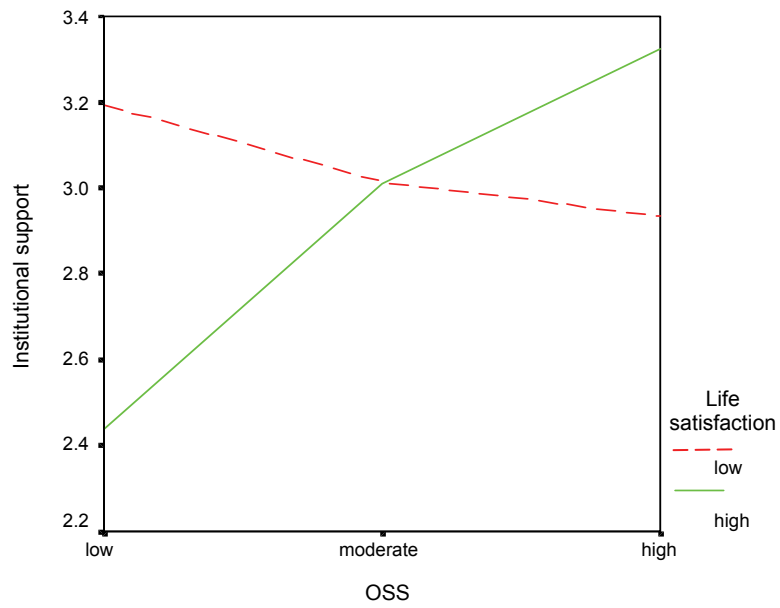


Figure 1. Moderating effect between OSS and life satisfaction for IDCB-institutional support.

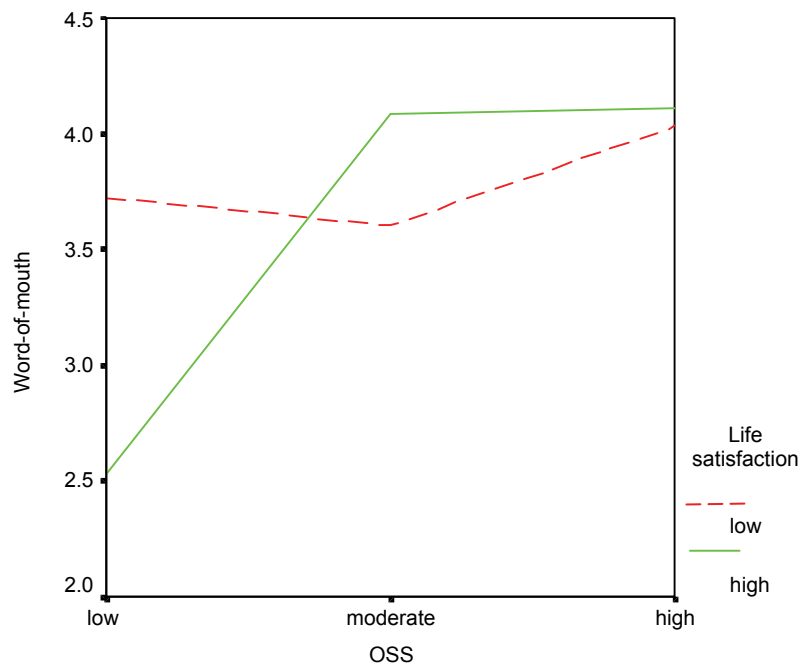


Figure 2. Moderating effect between OSS and life satisfaction for IDCB-word-of-mouth.

Figure 3 illustrates that for low levels of life satisfaction, the impact of OSS on IDCB-financial contributions was negative, moving from low to moderate levels of OSS. Beyond the moderate level of OSS, the impact was found to be negligible. However, for high levels of life satisfaction, the impact of OSS was in a positive direction when moving from low to moderate levels of overall student satisfaction. Again, the impact was found to be negligible when moving from moderate to high levels of OSS. Two major conclusions can be drawn from this result. Firstly, the effect of satisfaction with service on the discretionary behaviour is limited to moderate levels of satisfaction with the service, irrespective of the state of satisfaction with life. Secondly, for low to moderate levels, satisfaction with service encourages financial contributions to the alma mater amongst alumni who are satisfied with their lives and the reverse for those who are dissatisfied with their lives.

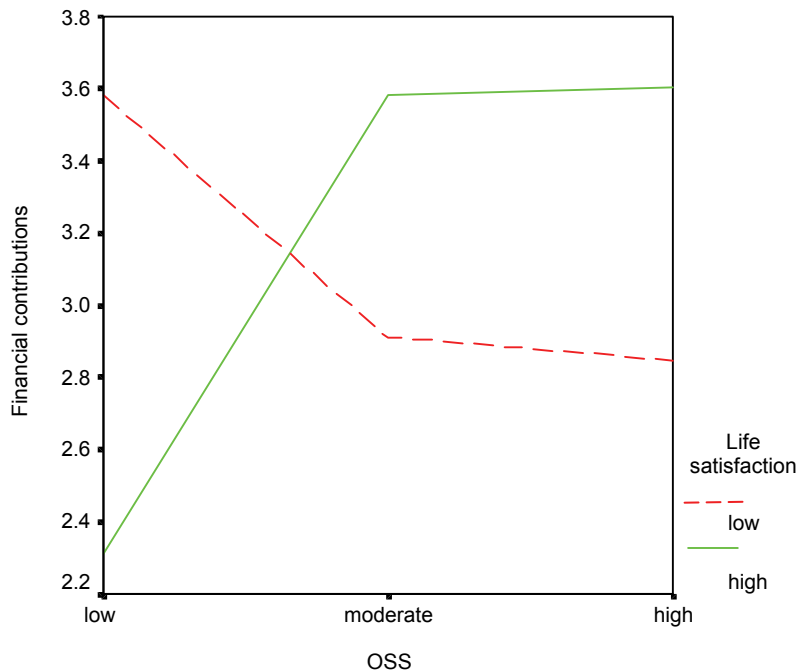


Figure 3. Moderating effect between OSS and life satisfaction for IDCB-financial contributions.

## **DISCUSSION AND IMPLICATIONS**

This study seeks to address the question of whether overall satisfaction with service impacts intended discretionary behaviour uniformly across all graduates (vis-à-vis their satisfaction with life). For all three intended discretionary behaviours, the findings show that the answer is a categorical "no" where we find that the impact of overall satisfaction with service on intended discretionary behaviours is highly dependent on whether or not the graduate is satisfied with his or her life situation. In particular, overall satisfaction with service either has a negligible or a negative impact on intended discretionary behaviours amongst graduates with low life satisfaction, whereas the impact is positive amongst those with high life satisfaction. This is consistent with the views of Fournier and Mick (1999). This suggests that, with the same level of overall satisfaction with service, MBA graduates who are highly satisfied with life may not expect reciprocity when they perform discretionary behaviours, while those who are less satisfied with life may generally expect greater reciprocity. It supports the notion that direct evaluations of overall service satisfaction on the MBA graduates' IDCB are insufficient and that their experiences of life's momentary events should be taken into consideration. Another explanation for this phenomenon can be linked to materialism. Belk (1995) describes materialism as the importance that possessions play in an individual's life. This may posit that people with high materialism levels expect reciprocity when they perform collaborative services with another party. Furthermore, studies have found that materialism is negatively related to life satisfaction (Ryan & Dziurawiec, 2001). Thus, it is logical to state that the same level of overall service satisfaction will spur MBA graduates who are highly satisfied with their lives to contribute to IDCB much more than it will those who are less satisfied with life.

The discussion implies that theoretically in the Malaysian educational setting and MBA programmes specifically, the overall service satisfaction is not necessarily related to the IDCB in a direct or linear fashion. In terms of managerial implications, the non-impact of overall service satisfaction on discretionary behaviour amongst those with low life satisfaction may suggest that, besides overall service satisfaction, the MBA providers in Malaysia might expand their services to include non-academic elements, such as counselling and/or other life matters. Otherwise, providing good services to those with low life satisfaction will not translate into DCB.

Further, it is noted that amongst those who are satisfied with their life situations, the positive impact of overall satisfaction with service on intended discretionary behaviours of word-of-mouth recommendations and financial contributions only occur for low to moderate levels of satisfaction with service. This means that providing services beyond a moderate level of overall satisfaction might not

make any discernable change to graduates' intentions to perform these two discretionary behaviours. This can also be interpreted to mean that, amongst those who are contented with their life, it does not take much to motivate them to perform discretionary behaviour. This can be explained by a statement made by Oishi and Diener (2001). According to them, people who are highly satisfied with their lives choose to be in more pleasant situations, create more pleasant social environments, and are more sensitive to positive information than those who are less satisfied with their lives. In this manner, it would be possible that MBA graduates would be more willing to perform positive word-of-mouth recommendations and to make financial contributions as long as a sufficient standard of overall satisfaction with service is maintained.

In relation to financial contributions, the MBA graduates are mostly middle-age adults, and most work in business- and managerial-related occupations. It can be inferred that most of them are high-income individuals. Money, to a certain extent, has increased their satisfaction with their lives because money represents their success, and, for them, money is not evil (Tang, Kim, & Tang, 2002). To a certain degree, contributing financially without expecting reciprocity seems to be highly possible because they have already been sufficiently rewarded in terms of possessions. Obviously, this discussion implies that the management of Malaysian MBA programmes should put their resources to better use by focusing on other areas of the student experience rather than trying to achieve greater heights of overall service satisfaction as far as the intended discretionary behaviours of word-of-mouth recommendations and financial contributions are concerned.

Another interesting result indicates that the strength of the relationship between the overall satisfaction with service and with life to the intended discretionary behaviours is highest for word-of-mouth behaviour. This can be explained by the fact that word-of-mouth recommendations are the least demanding of the three intended behaviours, whereas the other two discretionary behaviours require the commitment of time and of financial resources. This does not mean, however, that word-of-mouth discretionary behaviour is not important: in today's environment, the choice of highly intensive and long-term services relies heavily on word-of-mouth recommendations. Furthermore, it is relatively easier to perform because it can be carried out anywhere and at any time without much hassle or effort. More importantly, Malaysian culture generally places less weight on objective data and more on word-of-mouth communications. The aforesaid clearly implies that, in the educational setting, this type of DCB is mostly preferred by MBA graduates in expressing their overall satisfaction with service generally and with life specifically.

To conclude, MBA programmes in Malaysia that integrate or incorporate life issues, such as life satisfaction, into their services may have greater success in gathering support from their alumni and in providing better services to their students. The results of this study may offer preliminary support that, even though the occurrence of student dissatisfaction with overall services is known to reduce the likelihood of performing DCB, it is possible that high levels of life satisfaction may counteract the non-performance of DCB. Overall, the results of the study suggest that, on the one hand, MBA providers need to respond to student needs, but also that, on the other hand, they must not forget to incorporate other aspects of student lives into their strategy implementations, since those aspects are instrumental in the formation of the response to overall service satisfaction of intended discretionary behaviours.

### **LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

Although this study generated some interesting results, it is not without potential limitations. The participation levels of MBA graduates from private MBA programmes were disappointing, mainly because most of the these MBA graduates that we contacted were not the targeted respondents (campus-based graduates) but distance learners. Also, most of the private Malaysian MBA programmes were not cooperative and were reluctant to disclose their MBA graduates' data. In terms of future research, the present study suggests that, since segmentation on life satisfaction of MBA graduates is needed to evaluate the effects on discretionary behaviours, it is important to investigate the relationship between various life domains (e.g., family life, work life, social life, personal health, material passions, self, spiritual life, and life in Malaysia) in the future. A stepwise regression analysis is recommended so that the researchers can rank the set of life domains according to which are the most important in explaining the variance of life satisfaction. Besides graduates, future research should also focus on other customer groups (e.g., internal customers, employers, government, and the general public), since this study only included the student customer (Joseph & Joseph, 1997). There are certainly other customer groups of higher education whose needs must be satisfied.

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