

Intended Discretionary Collaborative Behavior: A Study Among Students of Higher Educational Institutes

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Key Words:

1. Behavior,
2. Discretionary collaborative Behavior,
3. Intended discretionary
4. Collaborative behavior,
5. Students,
6. Higher educational Institutes.

Abstract

Discretionary collaborative behavior (DCB) is defined as a sense of attachment, whereby an individual exhibits citizenship behavior in exchange of positive experience without expecting reciprocity. 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 behaviors that benefit the alma mater. Whether or not this reciprocating behavior is consistent across all individuals, however, is much less clear. This objective of the study is to measure the intended DCB's of students of higher educational institutes in Kerala, India. This study was conducted among 192 students of regular and evening/part time B.Tech programmes offered by highly ranked public and private institutes. Through factor analysis, five factors of DCB got derived which include identification, support, communication, financial contributions and liaison and subsequently measures the psychometric properties of the scale.

INTRODUCTION

In India, higher education has transformed significantly in the past three decades. The education system had undergone change and is changing by a number of factors. The financial constraints of government that reflected in reduced budgetary allocations in this sector have led to greater liberalization in education. The combined effect of growing demand for higher education and intense competition between educational institutions have created a greater awareness among institutions to provide services that satisfy their students for their survival. The continued reduction in financial support from the government has had a similar effect on public higher education institutes.

The increased costs in higher education, ushered with declining standards indicate the necessity to recreate higher educational institutes that are responsive to student needs. This can be pursued by maximizing the provision of services to students, thereby satisfying them, while minimizing costs to the institutions (Elliot & Shin, 2002). Wiese (1994) noted that the result of unmanageable levels of dissatisfaction causes lower levels of student satisfaction and achievement and a higher rate of turnover. Tat, Jantan and Noor (2008) pointed out that behavioral intentions (BI) have been found to be positively impacted by overall student satisfaction (OSS). There is

not much evidence and clarity that whether the impact of OSS on BI is

uniform across all individuals. As individuals vary by psychological attributes which constitutes personality, it is important that other life issues be taken into consideration for examining OSS-BI relationship.

Individual's life satisfaction, which is considered to be related with BI, referred as his or her self-assessment of his or her current quality of life (Day, 1987). Even though several studies have been conducted to examine the life satisfaction construct in educational field (Berkel & Constantine, 2005; Chow, 2005; Huebner, Valois, Paxton, & Drane, 2005), no study was found that relates to student specific behavioral responses to service satisfaction in Indian context. This construct is relevant because of two reasons. First one is fact that the quest of education at graduate level, especially B.Tech programme is often emotionally strenuous. Second is the growing popularity of life-long learning. Suldo and Huebner (2004) noted that a positive life satisfaction reflects a tendency of satisfying life experience. Therefore the different levels of life satisfaction would have likely impact on behavioral responses.

Social interest has been regarded as an important contributor to individual's life satisfaction (Gilman, 2001). Magen and Aharoni (1991) noted that because of having a sentiment of belongingness, individuals' give up their personal wishes for displaying social commitment to others. Individuals who are concerned with the wellbeing

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of others will have more acceptance than those who are selfish. Crandall (1991) viewed that, individuals' with little consideration for others are assumed to have problems with work, friendship and family which lead to intricacy in adjusting to depressing life events. i.e., People who experience life satisfaction are more inclined to positive emotions (Oishi & Diener, 2001). This assertion signals that people who are highly satisfied with life are more likely to exhibit DCB's because they are rewarded in all aspects of their life, such themselves, families, school/college lives and work lives. Also they may not expect reciprocity when they perform DCB's compared to those who are less satisfied with their life. DCB's are defined as a sense of attachment, whereby an individual exhibits citizenship behavior in exchange of positive experience without expecting reciprocity. 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 behaviors that benefit the alma mater. Whether or not this reciprocating behavior is consistent across all individuals, however, is much less clear.

This research paper investigates the intended DCB of students of higher educational institutes in Kerala, India. Intended DCB's are examined among students of regular and evening/part time B.Tech programmes offered by public and private institutes. The criteria on which the population got selected are because of the general belief that B.Tech graduates are mature working individuals who are in a position to display DCB.

METHODOLOGY

Objective(s)

The objective of the study is to measure the intended DCB of students of higher educational institutes in Kerala, India. **Measures** Intended DCB is measured using a scale developed on the basis of previous studies (example: Tat, Jantan & Noor, 2008; Heckman & Guskey, 1998).

Table 1: Demographic Profile Of Respondents

Demographic Factors	Groups	Number	Per cent(%)
Type Of Institution	Public	108	65.25
	Private	84	43.75
Enrollment Status	Regular	144	75.00
	Evening/Part Time	48	25.00
Gender	Male	114	59.37
	Female	68	35.41
Marital Staus	Married	42	21.87
	Unmarried	150	78.13

Participants were asked to respond to the items by reflecting their opinion on a 5 point likert scale (1 - "most impossible" to 5 - "most possible"). Before pretesting, the identified items were further checked for their relevancy through discussion with academicians and researchers in management. Besides DCB items, the demographic profile of the students with respect to type of institution, enrolment status, gender and marital status are also included in the questionnaire.

Sample and Procedure

A total of 200 students of regular and evening/part time B.Tech programmes offered by highly ranked public and private institutes in Kerala, India were approached personally for data collection. Only 192 responses were received out of 200 respondents giving a response rate of 96 per cent. Besides primary information, the secondary information was also been collected from articles published in journals.

Demographic Profile of the Sample

The sample of 192 consisted of 108 respondents (56.25 per cent) from public institutes and 84 respondents (43.75 per cent) from private institutes. The enrollment status is grouped under two groups. In the first group, regular, number of respondents was 144 (75.00 per cent), while in the second group, evening/part time, number of respondents was 48 (25.00 per cent). Regarding the classification of respondents based on gender, 114 respondents (59.37 per cent) were male whereas 68 respondents (35.41 per cent) were female. Further the respondents were also classified on the basis of marital status and enrollment status. For marital status, 42 respondents (21.87 per cent) were married, 150 respondents (78.13 per cent) were unmarried. The detailed profile of the sample is displayed in Table 1.

Factor Analysis

The application of factor analysis on 32 DCB items is performed using principal component analysis method along with varimax rotation method. Hair, Bush and Ortinou, (2005) opined that data purification criteria includes Kaiser Mayer Olkin (KMO) value (greater than 0.7), Measure of Sampling Adequacy (MSA) (greater than 0.5), Eigen Value greater than 1, Correlation Coefficient (r-value) 0.3 to 0.9 and Factor Loading greater than 0.5. The application of factor analysis on DCB items displayed in Table 2 resulted in 27 items grouped into five factors as identification (4 items), support (6 items), communication (2 items), financial contributions (4 items) and liaison (11 items). Five items had to be deleted and maintained due to cross-loading. The KMO value of 0.820 and approximate

chi - square = 1126.39 at 0.01 level of significance is found to be good for final analysis. Thus DCB items converged into five factors after 12 iterations. The total cumulative

variance (62.245 per cent) and all MSA values are above the set criterion of 0.5.

Table 2: Factor Loading, Communalities, MSA, KMO and Value and Percentage of Total Cumulative Variance for DCB

Factors	Mean	S.D	F.L	Com	MSA
Factor - 1: Identification, % of Variance = 13.775%, Eigen Value = 4.753					
I1 - Wish to identify myself as alumnus of the Institute	4.31	0.97	0.768	0.669	0.874
I2 - Being an alumnus of the institute reflects my personality well	4.23	0.98	0.736	0.677	0.874
I3 - Think unwillingly of my institute	4.23	0.96	0.658	0.672	0.869
I4 - At times, I conceal that I am an alumnus of the Institute	4.23	1.11	0.661	0.589	0.932
Factor - 2: Support, % of Variance = 14.375%, Eigen Value = 4.342					
S1 - Associate myself with the admission process of the institute	4.21	0.92	0.793	0.664	0.776
S2 - Provide help for internship	4.12	0.97	0.752	0.668	0.833
S3 - Grant assistance for placements	4.14	0.93	0.663	0.540	0.875
S4 - Offer support to conduct industrial visits	4.22	1.16	0.726	0.667	0.874
S5 - Active member of the institute's alumni association	4.03	1.04	0.688	0.632	0.869
S6 - Will be a guest speaker/willing to propose appropriate industry speakers for industry - academia interaction	4.04	0.89	0.631	0.589	0.922
Factor - 3: Communication, % of Variance = 13.2356%, Eigen Value = 1.357					
C1 - Persuade relatives and friends to opt the institute for their children	4.07	1.07	0.793	0.653	0.836
C2 - Mention about of the institute in social Gatherings	4.03	0.87	0.764	0.662	0.863
Factor - 4: Financial Contributions, % of Variance = 13.335%, Eigen Value = 1.357					
FC1 - Contribute money to the institutes' infrastructure development	4.01	0.96	0.593	0.553	0.894
FC2 - Provide sponsorship to the conferences / seminars organized by the institute	4.17	0.93	0.788	0.659	0.854
FC3 - Endowment to financially needy students of the institute	4.04	0.99	0.726	0.667	0.874
FC4 - Awards to top scorers of the institute	4.05	1.11	0.688	0.632	0.869
Factor - 5: Liaison, % of Variance = 13.235%, Eigen Value = 1.258					
L1 - Inform stakeholders about t new developments in the institute	4.14	0.96	0.788	0.659	0.854
L2 - Participate actively in meetings of the Institute	4.03	0.98	0.726	0.667	0.874
L3 - Am in frequent contact with stakeholders of the institute	4.18	0.97	0.688	0.633	0.869



Factor - 4: Financial Contributions, % of Variance = 13.335%, Eigen Value = 1.357					
FC1 - Contribute money to the institutes' infrastructure development	4.01	0.96	0.593	0.553	0.894
FC2 - Provide sponsorship to the conferences / seminars organized by the institute	4.17	0.93	0.788	0.659	0.854
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L3 - Am in frequent contact with stakeholders of the institute	4.18	0.97	0.688	0.633	0.869
L4 - Try to stay informed about new developments in the institute	4.16	1.13	0.632	0.588	0.923
L5 - Invite others for discussions regarding improvements at the institute	4.05	1.05	0.789	0.659	0.855
L6 - Gather feedback from s takeholders regarding prospective improvements of the institute	4.02	0.87	0.727	0.668	0.875
L7 - Being affiliated with various initiatives of the Institute	4.25	0.94	0.689	0.633	0.868
L8 - Encourage alumnus to take an active role in the development of the institute	4.11	0.98	0.642	0.589	0.934
L9 - Provide support that may help the institute in obtain grants from research organizations	4.17	0.96	0.767	0.628	0.852
L10 - Work on research projects with faculty members of the Institute	4.21	1.06	0.724	0.668	0.875
L11 - Make innovative suggestions to improve the quality of the institute	4.08	1.14	0.689	0.634	0.868
Iterations = 12, KMO = 0.819, % of Total Cumulative Variance Explained = 62.245 %					
S.D - Standard Deviation; F.L - Factor Loading; Com - Communalities; MSA - Measure of Sampling Adequacy					

Reliability Analysis

After conducting factor analysis, the items are examined on the basis of reliability analysis which got displayed in Table 3. The cronbach alpha value (greater than 0.7), inter-item correlation: r-value (within 0.3 to 0.9), item mean (consistency in the mean values), item variance (consistency in the variance values) are used for scale purification (Netemeyer, Bearder, & Sharma, 2003; Foster, Emma, & Christian 2006). The reliability statistics of overall

cronbach alpha value as 0.852 (cronbach alpha values of DCB factors identification, support, communication, financial contributions and liaison are 0.850, 0.724, 0.895, 0.831, and 0.782 respectively), split half values [(items: first half - 0.847, second half - 0.732), (respondents: first half - 0.832, second half - 0.843)]; and the scale values of overall mean (M), overall variance (V) and overall standard deviation (SD) as M = 46.376, V = 87.783, SD = 8.152 brings the scale reliable.



Table 3 Item Statistics, Scale Statistics Cronbach Alpha and Correlation Values

Item Statistics		Item Mean		Mean			
		Item Variance		Variance			
Inter item Correlation		Mean		Variance			
		Variance		Standard Deviation			
Scale Statistics				Mean		4.215	
				Variance		0.029	
				Standard Deviation		8.152	
Reliability Statistics (Cronbach Alpha)				Identification		0.850	
				Support		0.724	
				Communication		0.895	
				Financial Contributions		0.831	
				Liaison		0.782	
				Overall		0.852	
(Split Half)				Items		First Half	0.847
						Second Half	
				Respondent:s		First Half	0.832
						Second Half	
Identification	r - values	Financial Contributions	r - values	Liaison	r - values		
I1 and I2	0.475	FC2 and FC4	0.538	L3 and L11	0.393		
I1 and I3	0.543	FC3 and FC4	0.393	L4 and L5	0.439		
I1 and I4	0.583	Liaison	r - values	L4 and L6	0.437		
I2 and I3	0.462	L1 and L2	0.548	L4 and L7	0.346		
I2 and I4	0.542	L1 and L3	0.393	L4 and L8	0.343		
I3 and L4	0.459	L1 and L4	0.439	L4 and L9	0.489		
Support	r - values	L1 and L5	0.447	L4 and L10	0.365		
S1 and S2	0.414	L1 and L6	0.346	L4 and L11	0.334		
S1 and S3	0.342	L1 and L7	0.304	L5 and L6	0.346		
S1 and S4	0.538	L1 and L8	0.498	L5 and L7	0.431		
S1 and S5	0.526	L1 and L9	0.346	L5 and L8	0.442		
S1 and S6	0.365	L1 and L10	0.234	L5 and L9	0.466		
S2 and S3	0.334	L1 and L11	0.356	L5 and L10	0.443		
S2 and S4	0.476	L2 and L3	0.451	L5 and L11	0.356		
S2 and S5	0.347	L2 and L4	0.462	L6 and L7	0.343		
S2 and S6	0.438	L2 and L5	0.476	L6 and L8	0.489		
S3 and S4	0.423	L2 and L6	0.483	L6 and L9	0.365		
S3 and S5	0.357	L2 and L7	0.491	L6 and L10	0.356		
S3 and S6	0.344	L2 and L8	0.336	L6 and L11	0.382		
S4 and S5	0.498	L2 and L9	0.383	L7 and L8	0.366		

S4 and S5	0.498	L2 and L9	0.383	L7 and L8	0.366
S4 and S6	0.346	L2 and L10	0.489	L7 and L9	0.333
S5 and S6	0.347	L2 and L11	0.355	L7 and L10	0.489
Communication	r - values	L3 and L4	0.366	L7 and L11	0.355
C1 and C2	0.498	L3 and L5	0.343	L8 and L9	0.356
Financial Contributions	r - values	L3 and L6	0.489	L8 and L10	0.363
FC1 and FC2	0.348	L3 and L7	0.355	L8 and L11	0.489
FC1 and FC3	0.304	L3 and L8	0.366	L9 and L10	0.355
FC1 and FC4	0.498	L3 and L9	0.343	L9 and L11	0.356
FC2 and FC3	0.346	L3 and L10	0.376	L10 and L11	0.333

Validity Analysis

Intended DCB items were identified based on previous studies followed by deliberations with the academicians and researchers in management helped in establishing face and content validity of the intended DCB in Indian context. The construct validity of the scale is assessed by examining the KMO, variance explained, communalities and factor loading values which got displayed in Table 2. Factor loading values and communalities of the five factors ranged between 0.661 to 0.768 and 0.589 to 0.677 (identification), 0.631 to 0.752 and 0.540 to 0.668 (support), 0.764 to 0.793 and 0.653 to 0.662 (communication), 0.593 to 0.788 and 0.553 to 0.667 (financial contributions), and 0.632 to 0.788 and 0.588 to 0.668 (liaison) and value of total cumulative variance explained = 62.245% support the construct validity of the intended DCB scale. The convergent validity of the sample is assessed by examining the r - values among respective items of five extracted factors. The r - values displayed in Table 3 are found to be significant within the acceptable criteria that is, between 0.333 and 0.583 at 0.01 level which reveals convergent validity of the scale. Thus the reliability and validity analysis signifies good psychometric properties of the scale.

CONCLUSION

This study measures the intended DCB of students of higher educational institutes in Kerala, India. The five factors extracted out of the study consist of 27 items grouped into five factors as identification (4 items), support (6 items), communication (2 items), financial contributions (4 items) and liaison (11 items). Based on social exchange theory, it is quite possible that students who have been recipient of positive experience in the institute will reciprocate by engaging themselves in greater levels of DCB themselves. That is, overall

satisfaction with service either has a negligible or a negative impact on intended DCB 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). Further, it is noted that amongst those who are satisfied with their life situations, the positive impact of overall satisfaction with service on DCB like word-of-mouth recommendations and financial contributions only occur for low to moderate levels of satisfaction of service. This means that providing services beyond a moderate level of overall satisfaction might not make any discernable change to BI to perform DCB's. It is interpreted that those who are contented with their life does not take much to motivate them to perform DCB. Oishi and Diener (2001) explained that people who are highly satisfied with their lives choose to be in more pleasant situations, create more social environments, and are more sensitive to positive information than those who are less satisfied with their lives. In this manner, graduates would be more willing to perform positive word-of-mouth recommendations and make financial contributions as long as a sufficient standard of overall satisfaction with service is maintained. In today's environment, the choice of highly intensive and long-term services like education relies heavily on word-of-mouth recommendations. Furthermore, it is relatively easier to perform word-of-mouth recommendations, because it can be carried out from anywhere and at any time without much hassle or effort. Also people of Kerala, India generally places less importance on objective data and more on word-of-mouth communications. Furthermore, word-of-mouth recommendations are preferred by graduates in expressing overall satisfaction with service generally and with life specifically.

LIMITATIONS

Although the study yields significant insights, some



limitations are worth addressing, and some promising areas arise for future research. First, the present research utilized a cross sectional study in a single sector (i.e., education) with a limited sample size. Further studies should focus on validation of intended DCB with wide sample size on other customer groups like employees in public and private sector, and other customers in education like teaching and non-teaching staffs since this study only included the student customer. Second, the sample selection was based on a convenience sampling, which is often used for exploratory work, rather than a random probability sample. Third, the study is based on a self-reported questionnaire. It is possible that respondents, may have, at least to some extent, biased the results by responding how they felt when the event occurred. Thus the results of this study should be considered indicative rather than definitive and future research should address this limitation by examining actual behavior instead of self-reported and behavior intentions.

SUGGESTIONS

Present day organizations face a plethora of challenges, with their future depending on gaining competitive advantage. Based on the findings of the study, a few recommendations for practice and further research are presented.

For Practice

The findings of the study provide insight into multiple helping behavior of students which are though discretionary in nature, but help in the overall functioning of the institutes. The following are some suggestions to encourage DCB among students.

1. Higher education service providers should respond to student needs by incorporating it in institutes' strategy, since these aspects are instrumental in the formation of the response to overall service satisfaction of DCB.
2. Educational Institutes' should perform core activities by consultation with all stakeholders including students and also according to the rules and regulations thus it creates a kind of trust and DCB among students.
3. Managements should acknowledge the contributions of alumni who serve as role models in practicing DCB, thereby motivates students to display the same.

For Further Research

This study raises a number of questions which could be emphasized in further research. Four directions for future research can be identified. This research has been applied to examine the higher education sector. However, this whole process of theoretical building can be applied to

other contexts of study such as another industry or another country, for digging in depth regarding the issue in different contexts. Prospective research can be structured in a similar way to the theoretical building of this research. Future research as a comparative study, possibly with more than two different industries or countries is recommended in order to understand this theoretical structure more thoroughly. Thus, there is a need to replicate and extend this study to other contexts either in other industries or countries. Future studies could consider to what extent the measures proposed in this study are valid in different service industries and what modifications need to be made in the scale items across different samples and contexts. Further, personal characteristics like relationship, age, income, education, profession and perceived risk play an important role in shaping behavior intentions. Potential research may test the moderating effects of these variables on DCB.

REFERENCES

- Berkel, L. A., & Constantine, M. G. (2005). Relational Variables and Life Satisfaction in African American and Asian American College Women. *Journal of College Counselling*, 8(1), 5-13.
- Chow, H. P. H. (2005). Life Satisfaction Among University Students in a Canadian Prairie city: A Multivariate Analysis. *Social Indicators Research*, 70(2), 139-150.
- Crandall, J. E. (1991). A Scale for Social Interest. *Journal of Individual Psychology*, 47, 106-114.
- Day, R. L. (1987). Relationship Between Life Satisfaction and Consumer Satisfaction. In A. C. Samli (Ed.), *Marketing and the Quality-of-Life Interface* (pp.289-311). Connecticut: Greenwood Press.
- Elliot, K. M., & Shin, D. (2002). Student Satisfaction: An Alternative Approach to Assessing this Important Concept. *Journal of Education Policy and Management*, 24(2), 197-209.
- Foster, J., Emma, B., & Christian, Y. (2006). *Understanding and Using Advanced Statistics*. New Delhi: Sage Publications.
- Fournier, S., & Mick, D. G. (1999). Rediscovering Satisfaction. *Journal of Marketing*, 63(4), 5-23.
- Gilman, R. (2001). The Relationship Between Life Satisfaction, Social Interest, and Frequency of Extracurricular Activities Among Adolescent Students. *Journal of Youth and Adolescent Students. Journal of Youth and Adolescence*, 30(6), 749-767.
- Hair, J. F., Bush, R. P., & Ortinou, D. J. (2005). *Marketing Research*. Delhi: Tata McGraw Hill Publications.
- Heckman, R., & Guskey, A. (1998). The Relationship Between Alumni and University: Toward a Theory of Discretionary Collaborative Behavior. *Journal of Marketing Theory and Practice*, 6(2), 97-112.
- Huebner, E.S., Valois, R. F., Paxton, R. J., Drane, J. W. (2005). Middle School Student's Perceptions of Quality of Life. *Journal of*



Happiness.Studies, 6 (1), 15-24.

Magen, Z., & Aharoni, R. (1991). Adolescents' Contributing Toward Others: Relationship to Positive Experiences and Transpersonal Commitment. *Journal of Humanistic Psychology*, 31(2), 126-143.

Netemeyer, R. G., Bearder, W., & Sharma, Subash. (2003). *Scaling Procedures, Issues and Applications*. London: Sage Publications.

Oishi, S., & Diener, E. (2001). Re-examining the General Positivity Model of Subjective Well-Being. The Discrepancy Between Specific and Global Domain Satisfaction. *Journal of Personality*, 69(4), 641-666.

Suldo, S. M., & Huebner, E. S. (2004). Does Life Satisfaction Moderate The Effects of Stressful Life Events on Psychopathological Behavior during Adolescence During Adolescence? *School Psychology Quarterly*, 19(2), 93-105.

Tat, Haum, Hon., Jantan, Muhammad., & Noor, Mohd., Nasser, Mohd. (2008). Discretionary Collaborative Behavior (DCB) of Students From Institutes of Higher Learning in Malaysia. *Asian Academy of Management Journal*, 13(2), 1-15.

Wiese, M. D. (1994). College Choice Cognitive Dissonance: Managing Student/Institution Fit. *Journal of Marketing for Higher Education*, 5(1), 35-47.

