SATISFACTION OF MARKETING/MANAGEMENT STUDENTS IN HIGHER EDUCATION

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ABSTRACT
Marketing and management departments preach a continual discourse about the importance of feedback from customers. Yet many business schools do not take the time to develop their own student satisfaction surveys to provide the departments with useful feedback. Business schools are constantly forced to compete with other colleges and often other majors within the university setting. This study provides an analysis of student satisfaction based on a questionnaire mailed to alumni.

Keywords: Higher Education, Satisfaction, Customer Feedback, Factor Analysis, Transferable Skills.

INTRODUCTION
This study examines the satisfaction reported by students in a marketing/management department within a medium-sized university. Six types of perceived skills (communication, problem-solving, global understanding, understanding terminology, teamwork, and ethical decision making skills), employment status, income, and highest degree earned are used as predictors of the level of satisfaction reported.

RESEARCH QUESTION
What is the impact of perceived skills, employment status, organizational position, income, and highest degree earned on student satisfaction with the marketing/management department?

PREVIOUS RESEARCH

Educational Literature
Increasing competition and budget cuts in higher education have recently forced universities to turn to student satisfaction as a sign of quality. Alves and Raposo (2007) found image, value, and quality perceived as the three most influential variables for satisfaction. Previous literature also encouraged a focus on the antecedents of student satisfaction so colleges could realign their processes and become more customer-focused (DeShields, Kara, and Kaynak 2005). Nasser and Abouchedid (2005) assessed student satisfaction through transferable skills, from education received to the alumnus' current job position.

McGrath (2007) discusses the objectives of business schools and their emphasis on research and teaching. Business colleges have been operating on the publish or perish model, and seem to have forgotten about their teaching responsibilities. A focus on student satisfaction can bring teaching back to its priority position again.

Services Literature
Previous research in marketing by Parasuraman, Zeithaml, and Berry (1985, p.42) defined service quality as "a measure of how well the service level delivered matches customer expectations." Parasuraman et al (1985) provided ten factors affecting service quality including reliability, responsiveness, and tangibles. Parasuraman et al (1988) also published the first article on SERVQUAL, a framework including dimensions of determining service quality. SERVQUAL recommends different measures but also notes that each satisfaction survey should be adapted to the specific area. Higher education is a unique service category and therefore many distinctive areas should be measured that go beyond the SERVQUAL variables.

The disconfirmation model suggests that service quality is assessed by comparing the actual performance to the expected service experience (Cronin and Taylor 1992). To be rated high on quality, the service provider's goal is for the actual and expected experiences to be as similar as possible.

CONTRIBUTIONS
The contribution of this work is to try to find measures of satisfaction among alumni of higher educational institutions. This framework will help universities to establish the customer-oriented marketing strategies that are needed due to increased competition for students, budget cuts, and the feud between quality teaching and publication.

HYPTOHESES
1. Current employment status (full-time, part-time, or not working) will be positively related to student satisfaction.
2. The perceived skills received from the educational experience will be positively related to student satisfaction.
3. Income level will be positively related to student satisfaction.
4. Highest degree earned will be positively related to student satisfaction.
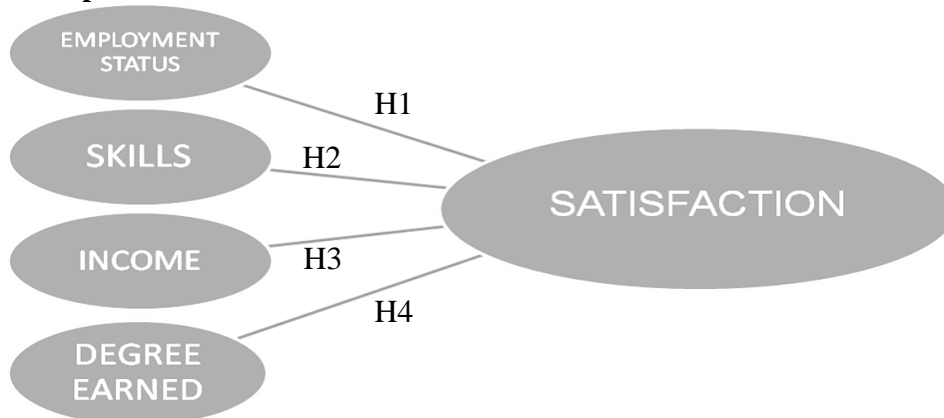
Conceptual Model

Figure 1

DESCRIPTION OF THE SAMPLE AND DATA
Questionnaires were administered to over 500 alumni, graduating within the last 15 years, from a medium –sized university in the Midwest. The survey contained 23 questions inquiring of demographics and specific perceptions of the alumni. Of those surveyed 262 graduates with Bachelor 's degrees in Marketing, Management, or International Business returned the questionnaires. After accounting for missing data, 235 observations were complete. The average years of professional experience of the respondents were 6.3 years. In the final sample, 104 respondents were male and 152 female. More than 50% of the respondents graduated between 0 and 5 years ago, 28% between 6 and 10 years ago, and 22% between 11 and 15 years ago.

Dependent variables
Satisfaction is measured by four constructs using a five-point Likert Scale: overall satisfaction, overall quality, preparedness to enter the workforce, and grade for the Marketing/Management Department. The first measure, the perceived quality of education received, was based on a scale from "low quality" to "high quality" with the middle value of "neutral." The second variable, satisfaction with the higher education delivered by the marketing/management department, was measured on a five-point scale from "completely dissatisfied" to "completely satisfied" with a middle value of "neutral." The third construct, preparedness to enter the workforce, was measure on a scale from "highly prepared" to "poorly prepared." The final construct, grade for the Marketing/Management Department, was measured on a scale consisting of "A, B, C, D, and F."

Independent variables
The first predictor variables consist of perceived skills the alumni possessed, with the implication that the marketing/management department assisted them in acquiring or prepared them to acquire the skill. Six different skills--communication, problem solving, teamwork, ethical decision making, understanding terminology, and global understanding skills--were assessed on a five-point likert scale from "poorly prepared" to "highly prepared."

Employment status was assessed by three constructs: full-time, part-time, or not employed. This measurement was made into two dummy variables for use in regression analysis.

Income was assessed using intervals of $15,000 starting with "$0 to $15,000" and ending with "Over $150,000" (0-15,000; 15,001-35,000; 35,001-55,000; 55,001-80,000; 80,001-105,000; 105,001-130,000; 130,001-150,000; and over 150,000). Income was treated as ordinal data because of the fairly equal range of the groups.

Highest degree earned was evaluated by respondents' indication of bachelor's/ undergraduate degree, master's degree, or doctoral degree. This measurement was also transferred into two dummy variables for the purposes of regression analysis.

Descriptive Statistics of Variables

Variable	Mean	Median	Standard Deviation	Min/Max	Range
Communication Skills	4.2	4.0	.80	1/5	4
Problem-solving Skills	3.9	4.0	.74	1/5	4
Teamwork Skills	4.4	4.0	.73	1/5	4
Ethical Skills	4.1	4.0	.79	2/5	3
Terminology Skills	3.8	4.0	.82	1/5	4
Global Skills	3.5	4.0	.88	1/5	4
Overall Quality	4.3	4.0	.71	1/5	4
Overall Satisfaction	4.2	4.0	.66	2/5	3

Grade for Department	1.7	2.0	.65	1/4	3
Prepared to enter	3.7	4.0	.75	1/5	4
Employment Status: Full-time	.91	1.0	.29	0/1	1
Employment Status: Part-time	.03	0	.18	0/1	1
Income	3.3	3.0	1.4	1/8	7
Degree Earned: Bachelor's	.84	1.0	.37	0/1	1
Degree Earned: Master's	.14	0	.35	0/1	1

Table 1

METHODOLOGY

Factor Analysis of four measures of satisfaction
First, four factors of satisfaction, quality, preparedness, and overall grade of the department were factor analyzed into one measurement. The results of the factor analysis for the four satisfaction measures were an eigenvalue of 2.667 with explained variance of 66.667. This means that almost 67% of the variance is explained by the new factor containing the four measurements of satisfactions. The factor loadings were also similar with high loadings on preparedness (0.656), quality (0.772), satisfaction (0.876), and grade (-0.847). One satisfaction measure was extracted from the factor analysis performed.

Factor analysis of four measures of skills
Next, the six perceived skills of communication, teamwork, global understanding, understanding terminology, problem-solving, and ethical skills were factor analyzed through principle component analysis to obtain one measure of perceived skills for our regression model. The results of the factor analysis for the six skills were an eigenvalue of 3.027 with explained variance of 50.45. This means that 50% of the variance is explained by the new factor containing the six skills. The factor loadings were also similar and high at communications skills (0.656), problem-solving skills (0.772), teamwork skills (0.701), ethical skills (0.766), understanding terminology skills (0.662), and global understanding skills (0.696). The single factor that was extracted from the analysis can be called transferable skills. Factor scores were saved for both skills and satisfaction and later used in the regression analysis.

Regression Analysis
The results from factor analysis of satisfaction and perceived skills will be used to predict the overall alumni satisfaction with the marketing/management department. Next, skills, income, position, employment status, and degree earned will be regressed on the satisfaction measurement. Data analysis shows the assumption of normality was not met by the dependent variable satisfaction. The graph clearly shows a binomial distribution where about 20% of the sample is extremely satisfied. Therefore the sample was split in two groups and two regressions were run. The following are the results from the first subsample which includes the normal distributed satisfaction observations.

Independent Variables	B	Beta	t-values	Significance
Constant	-.271		-.513	.608
Employment Status Full	-.166	-.057	-.648	.518

Employment Status Part	.124	.030	.342	.733
Income	.000	-.001	-.020	.984
Degree Earned: Bachelor's	.211	.094	.483	.630
Degree Earned: Master's	-.014	-.066	-.032	.975
Skills (obtained from factor analysis)	.422	.487	7.43	.000

Table 2
R^2=.253
Adjusted R^2=.228
F-test=10.139
Significance of F-test=.000

The results of the regression analysis for n=186 resulted in a R^2 of 0.253 which indicates that approximately 25% of the variance in satisfaction is explained by the model. The adjusted R^2 takes into consideration the sample size and is a more honest value at 0.228. The F-test is 10.139 and is significant at .05. This suggests that the group of independent variables does show a significant relationship with the dependent variable, satisfaction. The t-test results show that only skills is significant in the model and has the largest beta of 0.487.

The following are the results of the second subsample of the highly satisfied alumni.

Independent Variables	B	Beta	t-values	Significance
Constant	1.208		6.98	.000
Employment Status: Full	.091	.163	.997	.324
Income	-.020	-.181	-1.117	.270
Degree Earned: Bachelor's	-.017	-.037	-.110	.913
Degree Earned: Master's	.122	.242	.746	.460
Skills (obtained from factor analysis)	.091	.367	2.203	.003

Table 3
R^2=.182
Adjusted R^2=.084
F-test=1.865
Significance of F-test=.121

The results of the regression analysis for n=47 resulted in a R^2 of 0.182 which indicates that approximately 18% of the variance in satisfaction is explained by the model. The adjusted R^2 takes into consideration the sample size and is a more honest value at 0.084. The F-test is 1.865 and is not significant at .05. This suggests that the group of independent variables does not show a significant relationship with the dependent variable, satisfaction. The t-test results show that the

only significant independent variable is still skills with a beta of 0.367. Since the F-test is not significant we can conclude that our independent variables do not show a significant relationship with the dependent variable. In this case the sample size may be too small.

CONCLUSION AND DISCUSSION
The findings suggest that highly-perceived skills lead to higher satisfaction scores, and therefore hypothesis 2 was supported. Results, however, did not show a significant positive relationship between employment status, income, or highest degree earned and satisfaction (hypotheses 1, 3, and 4 are not supported). These results could have resulted from the effect of alumni obtaining more income and higher degrees, thereby gaining more knowledge; this leads them to process information, especially information about past experiences, more critically. Alumni that have only their bachelor's degree and are making an average income seem to be more satisfied. These results are aligned with the context of the study in which students were surveyed at a less reputable university, which serves mostly students that want to stay close to home.

Another reason for the non-significant results is the overwhelming number of alumni employed full-time, and the high number of alumni with only a bachelor's degree. From the scatter plots under the subheading 'Assumption of Normality,' one can see that these variables were not normally distributed. Since employment status and degree earned have very little variation our regression model did not predict a significant relationship.

Practical implications of this study for the university are to continue to prepare students by instructing with emphasis on the six perceived skills that were positively related to the satisfaction measures. The university may also want to work on a positive perception among higher income earners and higher degree earners to have a positive impact on the size of future donations.

LIMITATIONS AND FUTURE RESEARCH
A limitation of this study is its use of only one college in a rural farming area. Further research should compare the results for an AASCB accredited institution versus a non-AACSB accredited university. Further research needs to establish a way to measure both objective (grade point average) and subjective (perceived skills) measures in one study. Another extension of this study is to include the effects of participation in an internship or participation in a study abroad program on satisfaction.

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