

CONSUMER SATISFACTION WITH MARKETING EDUCATION: EXTENDING SERVICES THEORY TO ACADEMIC PRACTICE

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ABSTRACT

The following study examines the argument that marketing educators should integrate emerging service quality/satisfaction knowledge into marketing education as a means of (1) enhancing pedagogy and (2) helping academic organizations better monitor and control their performance as a service firm. The study first asserts that academic institutions can be appropriately described as a service. The study next argues that satisfying the internal and external constituencies of academic institutions should be a primary organizational concern for academic institutions. Based on this argument, the author concludes that it appears reasonable to assert that business schools should be measuring the satisfaction of these constituencies in much the same way that consumer satisfaction is measured in general service environments. The study then identifies the emerging model of satisfaction from the services literature and applies the model to several student settings within an academic institution of higher learning. The study demonstrates that both pedagogical and organizational purposes can be met by using marketing research classes as a means of measuring stakeholder satisfaction on an ongoing basis. Recommendations for marketing academicians are presented and discussed.

INTRODUCTION

The following study begins with the premise that academic institutions can be appropriately described as service firms. Quinn (1992, pp. 5-6) argues that while there does not exist a complete consensus on definitions related to services, "...most authorities consider that the services sector includes all economic activities whose output (1) is not a product or construction, (2) is generally consumed at the time it is produced, and (3) provides added value in forms (such as convenience, amusement, timeliness, comfort, and health) that are essentially intangible concerns of its purchaser." Lovelock (1983) specifically identifies education as an intangible service act directed at people. Thus, it does not appear

controversial to suggest that marketing education can be considered within the domain of the services sector when we consider that:

- education is neither a product nor a construction in the traditional manufacturing sense.
- education is consumed as it is produced both in and outside the classroom. That is, while knowledge can be inventoried in libraries and textbooks, education does not occur until this knowledge is consumed.
- education provides an intangible value to its recipients. For example, few would argue the benefits of a liberal arts education, while at the same time we often struggle as marketing educators to relate associated abstract concepts and ideas to "real world" applications and training.

Marketing academic institutions, like other types of service firms, also produce a "product." Mangold, Brockway, and Niffenegger (1994) argue that the educational product can be defined as "learning" based on an apparent assumption that students are a primary stakeholder of academic institutions. The author of the current research accepts this perspective but adds that knowledge itself appears the primary product for other stakeholder groups such as local communities and the general business world who often depend on the business-oriented body of knowledge from the social sciences.

There also appears to be strong consensus in the marketing and management literatures that one of the attributes of successful service firms is their ability to satisfy their "customers" better than the competition (c.f., Heskett, Sasser, and Hart 1991; Quinn 1992; Rust and Oliver 1994). Thus, given the preceding argument that marketing educational institutions are service firms, it appears a reasonable assumption that satisfying the "customers" of academic institutions should be a primary concern of marketing academicians. The following study furthers this perspective by first

examining the arguments for and against academic institutions concerning themselves with satisfying "customers." The conclusion of this examination is that there appears no compelling reason why marketing educators should not measure stakeholder satisfaction with at least some aspects of marketing educational products. Second, a brief review of the literature related to conceptualizing and operationalizing the customer satisfaction construct is presented. Third, the methods and results of a study extending the identified model of customer satisfaction to a number of settings students encounter within an academic institution are explicated. Finally, the implications of the study are presented and discussed.

SATISFYING "CUSTOMERS" IN MARKETING EDUCATION

There are a number of obvious customers or stakeholders of academic business programs, including among others (1) students who directly consume the educational process, (2) parents and other key influences in students' lives who often pay for the academic product, (3) organizations that hire college graduates from college of businesses, (4) local communities that rely on the economic impact and access to knowledge and expertise of universities, (5) academic staff and the faculty who actually produce knowledge and the educational product, and (6) society-at-large which relies on the body of knowledge in business to provide this country with a competitive edge in the emerging world economy. However, before moving on to a discussion of *how* to measure satisfaction of these constituencies, a discussion of *why* we should measure stakeholder satisfaction in academic institutions appears in order.

The first reason we should consider measuring stakeholder satisfaction in the case of marketing education concerns the growing criticism of existing marketing curricula as well as the academic community of the United States. For example, Anderson (1992) presents a scathing argument that the academic community in the United States is ignoring the needs of its constituencies (for purposes of self glorification). Wright, Bitner, and Zeithaml (1994) argue that business education is no longer preparing students to become effective employees and leaders.

Ronchetto and Buckles (1994) appear to support this assertion by stating that business schools have historically been ineffective in teaching interpersonal skills, teamwork, or negotiation skills. Roach, Johnston, and Hair (1994) review the literature and conclude that four major issues appear important in impeding the production of the marketing educational product: (1) faculty work activity time allocation, (2) career development and training, (3) research on marketing education, and (4) curriculum relevance.

The second reason we should consider measuring stakeholder satisfaction concerns the relevancy of marketing education. In terms of the learning dimension of marketing education, Rotfeld's (1995) argument that one outcome of poorly managing the marketing educational product is that the number of marketing majors in the United States is rapidly declining. He specifically cites marketing's failure to appropriately respond to direct competition within the realm of academics as the primary reason for enrollment declines. Rotfeld suggests that what has resulted is a situation where students see a diminishing level of relevance in marketing curricula to their efforts to obtain training at universities, and placement upon graduation. Berry (1993) similarly argues for relevancy in the knowledge dimension of the marketing educational product, which he defines as whether or not our research addresses and resolves real problems in the practice of marketing.

In short, there appears to be a great deal of stakeholder dissatisfaction with both the practice and relevancy of today's business education in the United States. However, there is evidence that marketing educators are beginning to be moved by these criticisms. Swartz (1994) recently appropriately points out that while business schools (and faculties) are in a state of confusion, there does appear to be a growing call for emphasizing services marketing theory in both curricula and the production of the academic product as one means of overcoming this confusion. For example, Stuart and Tax (1994) develop a framework based on the "House of Quality" technique that provides a means for cross-functional integration of quality into marketing courses. Carter (1994) similarly states that the heightened awareness of the importance of service quality has led universities to incorporate TQM and service quality issues into

marketing curricula. The argument would be that adding such concepts helps teach teamwork, interpersonal skills, and the importance of a customer orientation. Therefore, at a minimum, there appears to be at least some initial interest by marketing faculty in investigating the possible marriage of services theory with marketing educational practices.

Stafford (1994) implicitly supports this assertion by arguing that a limitation of the marketing efforts of academic institutions to date has been conducting marketing practices related only to recruitment and promotion. Mangold, Brockway, and Niffenegger (1994) similarly argue that one reason why there appears to have been so little improvement in teaching quality in the United States has been the fact that American educators have not felt the pressures for quality improvement apparent in the manufacturing sector. However, these authors further assert that this scenario is changing and that there are increasing demands for teaching quality and accountability. Gwinner and Beltramini (1995) argue that the importance of satisfying students' expectations is growing, and calls for measuring alumni satisfaction and behavioral intentions using rigorous analytical methods, a call met by the current research.

These increasing demands for improved service quality and stakeholder satisfaction in business education signal support for the extension of general services theory to the product of colleges of business. In fact, there have been some very recent efforts to generalize service quality measurement theory to the marketing educational process. Butler, Laumer, and Moore (1994) review practices related to graduate teaching assistants in college of businesses and conclude that a majority of the schools they investigated are making some efforts to improve the quality and effectiveness of their teachers. However, these authors further identify that the marketing discipline has a long way to go in the area of ensuring quality teaching in colleges of business in the United States and present a suggested instructional program for graduate teaching assistants. Wright, Bitner, and Zeithaml (1994) identify an emerging educational paradigm in response to the criticisms noted above that focuses on both teaching quality and instructional methods that also appears promising in terms of addressing many of the identified

issues.

A third major reason why marketing educators should begin engaging in measurement of the satisfaction of stakeholders relates to the argument that such controls are inevitable given that outcome-based education (OBE) will appear influential in the educational landscape of the United States over the foreseeable future. For example, Nicastro (1995, p. 1) characterizes OBE as, "Essentially, OBE focuses directly on relating curricular and instructional decisions to preestablished exit outcomes for students." She states that there are two reasons why marketing professors should consider the eventual impact of OBE on marketing curricula: (1) changes in the American workplace that have precipitated the shift in primary and secondary levels of education to OBE-based education are beginning to affect college graduates (e.g., increased diversity, increased competition, a trend toward more participative management styles, and the need for employees with higher-order cognitive skills); and (2) colleges will have to be able to respond to OBE-educated students' different set of perceptions and expectations of their college experience. In short, a situation appears to be developing wherein marketing education will increasingly be held to OBE standards.

The call for OBE is consistent with the previously identified calls for controlling the provision of the marketing educational product. This raises the interesting dilemma of whether or not marketing educators wish to proactively establish these standards themselves, or have them imposed by external stakeholder groups through the legislative process. We are fortunate in that the rapidly growing body of knowledge from the services marketing literature provides direction for appropriately measuring stakeholder satisfaction and service quality as key components of proactively developing such control processes. The purpose of the study reported herein is to demonstrate how marketing research classes can be used in this control process on an ongoing basis, while at the same time serving a pedagogical purpose by demonstrating the most recent satisfaction theory from the services marketing literature.

However, in fairness, it appears important to point out that not all marketers will support efforts

to use service quality perceptions and stakeholder satisfaction judgements for purposes of controlling the production of the marketing educational product, particularly in the case of students. In fact, Giacobbe and Segal (1994) suggest that one of the key underlying problems underlying any long-term solution to the problems in marketing education such as identified above relates to closing the "chasm" between marketing academicians and practitioners. The gist of this "chasm" appears to be related to whether marketing students should be "educated" or "trained."

There appears to be a view among some marketing educators that an emphasis on "training" and job placement, such as recently advocated by Rotfeld (1995) in relation to students as a stakeholder group, leads to a "trade school" mentality. These scholars might argue that such an approach may work well for the trades (e.g., plumbers, electricians, and carpenters), however, the purpose of a university education is to expose students to a broad range of knowledge accumulated over the course of history. Thus, understanding of the extant body of knowledge is the objective of a university education rather than the more pragmatic considerations of applicable job skills and placement post-graduation.

The author of the current research suggests that what emerges from a consideration of these two perspectives is the existence of a false dichotomy (i.e., these ends are not mutually exclusive). Berry (1995) touches on this issue and concludes that the ability for all organizations to deliver great service requires both "training" and "education." Berry (1995, p. 188) distinguishes the two terms as follows:

"Training helps servers build their skills, education helps them to build their knowledge. Training supports the 'how' of service delivery, education supports the 'why.' Education provides the context for skill building."

Thus, Berry accurately points out that training alone is not sufficient for service organizations. In other words, it does not appear reasonable to assume that just anyone can be trained to be a contributing member of a successful service firm.

Rather, there appears a necessary ambient level of cognitive skill necessary to properly function in a service economy such as that found in the United States, a position that appears consistent with those of Drucker (1992), Quinn (1992), and Herrstein and Murray (1994).

This is the reason the author of the current research asserts that the apparent controversy between "education" and "training" is inappropriate. There is no question that the economy of the United States is now largely service-based (c.f., Heskett, Sasser, and Hart 1991; Quinn 1992). Within this service economy, the fundamental unit of analysis, and where the vast majority of value is added to products, is knowledge based (Drucker 1992, Quinn 1992). In a nutshell, a knowledge-based, technology-driven, service economy appears to require participants with higher levels of cognitive abilities than necessary in the rapidly disappearing manufacturing-based economy. It is this trend that in part has led Herrstein and Murray (1994) to conclude that the educational system in the United States is intimately linked to the overall economy by serving as a conduit for and gatekeeper of the cognitively privileged in our society. In fact, it appears clear that opportunity in the emerging service economy will be highly correlated with levels of education for the foreseeable future in the United States. Thus, the idea that universities should focus on developing less cognitively challenging skills (i.e., training) is simply not consistent with nor will support the emerging service economy. In short, Berry (1995) correctly asserts that the service economy of the United States appears to require an "educated" pool of people that can be "trained" based on a foundation of advanced cognitive skills. This perspective appears consistent with the previously identified definition of the marketing educational product in the current study as comprised of at least the dimensions of "knowledge" itself and "learning."

However, this position does not also suggest that total control of curricular issues and research activities in college of businesses should continue to rest with faculty and administrators. Rather, if we are to appropriately generalize services theory to colleges of business and the marketing educational process, we should involve all of our stakeholders in the product development process

(i.e., curriculum and development of research agendas) as well as control processes (i.e., measurement processes such as those implied by OBE). For example, if businesses suggest that marketing graduates generally lack the sound communication skills or basic abilities to manage information technology required for adequate training, then colleges of business have a responsibility to strengthen emphasis on these concepts in courses of study. To do less would simply not be truly customer centered.

One question that may arise concerns the ability of stakeholder groups other than faculty to *knowledgeably* contribute toward the development of the marketing educational product. For example, Olshavsky and Spreng (1995) appropriately point out that students may lack the ability to assess the core components of marketing learning (e.g., rigor, relevance, substance). In such cases it is clear that faculty should retain the lion's share of input in curriculum development. However, this does not mean that we should not be developing measures of student satisfaction with the *service* quality students perceive from faculty (e.g., responsiveness, empathy, availability, and respect) as well as supplementary services (e.g., housing, financial aid, food service, book stores, and parking). Simply put, it appears reasonable to hypothesize that student satisfaction with the delivery of core and supplementary services will contribute to students' overall evaluations of their educational experience.

In summary, a careful consideration of whether or not colleges of business should measure stakeholder satisfaction as part of a process of applying services theory to marketing academic institutions leads to the conclusion that there appears no compelling reason to treat the educational service product, or educational service institutions, as somehow different from other (high involvement) service organizations. Based on this conclusion, the next section identifies how stakeholder satisfaction can be conceptualized and operationalized in order to achieve this objective.

THE EMERGING MODEL OF CONSUMER SATISFACTION

While the influence of the marketing concept has identified the important role of achieving

consumer satisfaction in the successful practice of marketing for some time, it has only been recently that marketing knowledge has significantly progressed concerning the appropriate conceptualization and operationalization of the consumer satisfaction construct. Oliver (1993a,b) recently proposes a model of consumer satisfaction which arguably represents the leading edge in empirically validated consumer satisfaction research to date. In short, Oliver (1993a) argues that consumer satisfaction can be conceptually defined as *a filling or fulfillment*. Oliver (1993b) operationalizes his proposed definition of consumer satisfaction using measures of affect and cognitive disconfirmation. Equation 1 presents a model of consumer satisfaction for academic environments based on Oliver's (1993a,b) models.

$$\text{Satisfaction} = f(\text{Affect, Disconfirmation}) \quad [1]$$

Oliver (1993b) essentially argues that consumer satisfaction judgements are comprised of both emotional (i.e., affect) and cognitive (i.e., disconfirmation) elements. Thus, satisfaction in academic settings can be thought of as the sum of (1) how consumers feel about the service they have received, as well as (2) how they perceive the performance of the academic service compared to some comparison standard. The next section presents a study that tests the presented model specific to students in an academic setting.

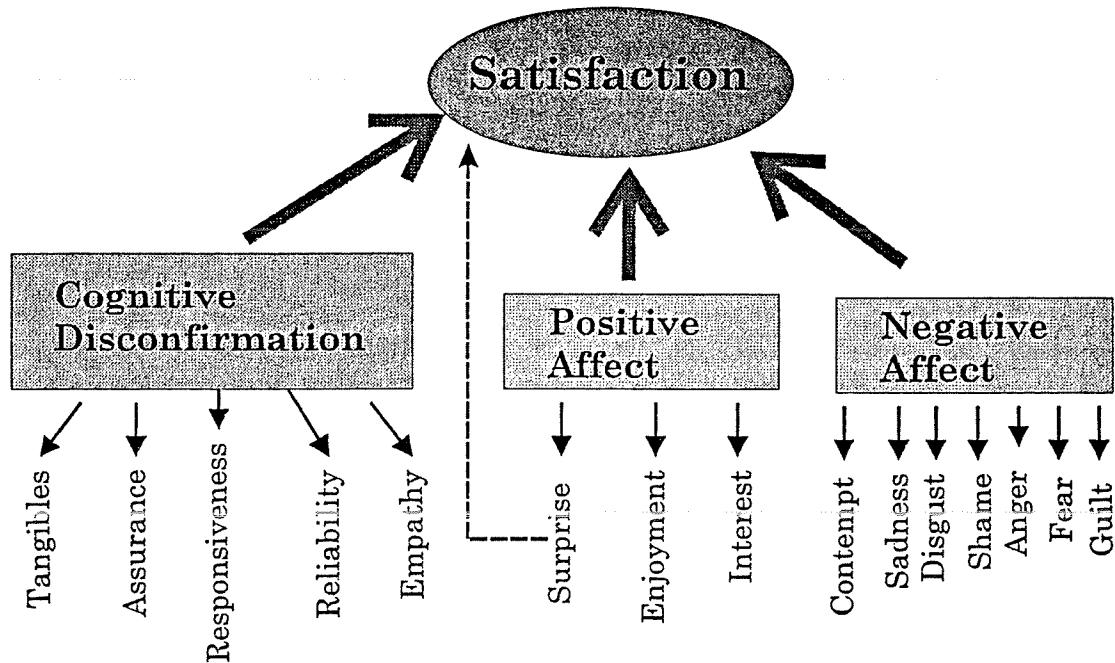
METHODS

The following section presents a study to test the efficacy of the presented model of satisfaction specific to an educational service setting. First, the measures employed in the current research are discussed. Second, the research hypotheses are explicated. The statistical methods employed in the current study are also presented in this section. Finally, the sampling frame and setting for the current research are overviewed.

Measures

The items used to operationalize the constructs in the current research are reported in Appendix A. The research model is presented in Figure 1 and necessitates the operationalization of three

Figure 1
The Research Model



general constructs: overall satisfaction, emotion or affect, and cognitive disconfirmation. Satisfaction is operationalized in the current research using six 9-point Likert-type scale items based on the items reported in Oliver (1980) that are generally considered reliable and valid in services research. Affect is operationalized in the current research using Izard's (1977) DES emotions scale based on the recommendations of Oliver (1993b). Ten specific emotions are identified as relevant and measured based on the development of Izard's scale of emotions. Oliver cites a number of studies that have validated the reliability and validity of this scale in previous research. Cognitive disconfirmation is operationalized in the current research by five 9-point Likert-type scale items with "better than/worse than" poles. These types of items are recommended by Westbrook and Oliver (1991) to operationalize disconfirmation over alternative operationalizations of the gap between performance perceptions and expectations. For purposes of simplicity, each of the five items used to operationalize disconfirmation corresponds

to a proposed dimension of service appraisal as identified by Parasuraman, Zeithaml, and Berry (1988): tangibles, empathy, assurance, reliability, and responsiveness (see Parasuraman, Zeithaml, and Berry 1988 for comprehensive definitions of these components and a detailed discussion of their conceptual and empirical origins).

The Research Hypothesis

A number of research hypotheses are tested in the current research. First, Oliver (1993b) argues that positive and negative affect are believed to make independent contributions to satisfaction/dissatisfaction judgements. In other words, Oliver asserts that positive experiences with a service may not be inversely correlated with negative experiences, a phenomenon known as independence. Oliver further asserts that the independence argument appears particularly relevant to product and service consumption where a variety of attributes appear to exist at different levels of abstraction. The implication of the

independence argument with regards to positive and negative affective responses is that care should be taken in regression-based models such as used in the current research to ensure that the positive and negative responses are captured independently in analysis. This leads to the first three research hypotheses

H1: Affect is a multidimensional construct reflecting separate dimensions for positive versus negative affective responses.

H2: Positive affect is positively related to overall student satisfaction.

H3: Negative affect is negatively related to overall student satisfaction.

Hypothesis 1 is assessed via exploratory factor analysis using the Factors module of SPSS for Windows (version 6.1). The method for factor extraction is principal components using Varimax factor rotation. The standard for factor extraction in the current research is the traditional standard of eigenvalues greater than one. Hypotheses 2 and 3 are assessed using the Regressions module of SPSS for Windows (method=enter). Contributions to satisfaction judgements are assessed based on the overall significance of the regression equations as well as the t-values associated with the independent variables. If the significance level is $\leq .05$, then evidence is presented that the associated independent variable statistically contributes to satisfaction judgements as a dependent variable.

Oliver (1993b) identifies two additional points that merit consideration in the current research. First, he points out that *negative* experiences are believed to be generally more strongly perceived by individuals (i.e., with greater intensity) as well as perceived as more salient. Therefore, we anticipate in the current research that negative emotions will contribute more strongly than positive emotions to satisfaction judgments. We can test this assumption by assessing whether the regression coefficient for the negative affect variable is larger than the regression coefficient for the positive affect variable. This leads to Hypothesis 4.

H4: Negative affect contributes more to

overall student satisfaction than positive affect.

Second, Oliver (1993b) points out that the "surprise" variable in Izard's scale used in the current research is a bivalent affect (i.e., positive, negative, and neutral), therefore, the items may be suspect in revealing the subject's intended valence. For purposes of the current research, surprise is treated as a positive or negative affective response in situations where the variable (1) loads with the other affective variables in exploratory factor analysis, and (2) contributes to a reliable set of affect items (i.e., coefficient $\alpha \geq .7$). In those situations where the surprise variable does not contribute to an affective dimension in a statistically reliable manner, surprise is treated as a separate independent variable in regression analyses as noted by the dotted line in Figure 1.

Cognitive disconfirmation is widely recognized to underlie the psychological processes that motivate satisfaction responses (c.f., Oliver 1993a,b). The model studied herein accounts for the influence of cognitive disconfirmation on satisfaction judgements as Hypothesis 5.

H5: Cognitive disconfirmation is positively related to overall student satisfaction.

Hypothesis 5 is also assessed in the current research using the Regression module of SPSS for Windows 6.1 software package (method=enter). The overall explained variance for satisfaction judgements in each service setting is subsequently assessed using the R^2 value.

Sample

The sample for the reported research was collected at a medium-sized Midwestern university. A total of 1,361 surveys were collected by the students of two undergraduate marketing research classes relevant to nine unique service settings located on the campus. The samples from two groups (Group 7 and Group 8) were not included in subsequent analysis as the student interviewers failed to follow instructions correctly by not collecting the full set of affect items from Izard's scale, leading to an effective sample size for

analysis of 1,149 completed surveys. The sampling frame for the research was all of the students of the university. Surveys were captured at alternative times of the day (during normal working hours) by personal interviews at the campus union in a form of modified mall intercept. Because of the experiential nature of satisfaction (c.f., Rust and Oliver 1994), respondents were initially queried to determine whether or not they had personally experienced the service they were assessing within the last six months prior to participation in the study.

Table 1 presents the samples collected by the twelve student research teams. The student groups assessed student satisfaction with the following services on campus: parking services (two groups), residence hall dining facilities (two groups), the

university book store, a competitor bookstore on campus, the university's efforts directed toward minority recruitment and retention, the residence halls in general, cleaning services at the university, and student health services (two groups). The services selected for evaluation by students were chosen because they are services that (1) students deal with on a relatively regular basis, (2) students are comfortable evaluating with some degree of confidence, and (3) represent supplementary rather than core educational services. Table 1 further identifies that some differences exist between samples in terms of proportions of gender and ethnic backgrounds, however, the distribution of the summed categories appear very similar to the distributions actually found in the student population and/or usage patterns of the specific services.

Table 1
Sample Characteristics

Group No.	Service	N	Gender		Ethnic Background				
			Male	Female	White	African-American	Hispanic	Asian	Other
1	Minority Efforts	79	29	50	41	27	9	1	1
2	Parking Services	74	50	24	60	6	3	3	2
3	Student Health Services	80	45	35	73	3	4	0	0
4	Student Health Services	96	37	59	83	10	5	0	0
5	Residence Halls-Living	83	46	37	77	3	2	0	1
6	University Book Store	98	52	46	88	6	2	1	1
7	Residence Halls-Dining	116	Sample not used due to failure to follow instructions in data collection.						
8	Parking Services	96	Sample not used due to failure to follow instructions in data collection.						
9	Competitor Book Store	98	47	51	90	3	2	2	1
10	Residence Halls-Dining	357	120	237	323	19	8	2	5
11	Physical Plant-Cleaning	104	49	55	100	2	0	0	2
12	Safe Ride	80	6	74	66	9	1	2	2
Totals		1361	481	668	1,001	88	34	11	15

Table 2
Correlation Matrix of (Averaged) Variables in Regression Analysis

	Disconfirmation	Negative Affect	Positive Affect	Satisfaction	Surprise
Disconfirmation	1				
Negative Affect	-.28	1			
Positive Affect	.37	-.18	1		
Satisfaction	.56	-.36	.38	1	
Surprise	.17	.27	.26	.14	1

Table 3
Results of Hypothesis Testing

Group Number	Service	Dimensions		Coefficient Alpha Scores	Mean Satisfaction Score	Regression Equation	R ²
		Affect	Disc ¹				
1	Minority Efforts	2	1	.8810 ² /.9178 ³ .9057 ⁴ /.8779 ⁵	5.85	Satisfaction = .55 ^a Disconfirm ⁶ + .30 ^b PosAffect ⁷	.67
2	Parking Services	3	1	.7078 ² /.8269 ³ .7869 ⁴ /.8495 ⁵	5.83	Satisfaction = .31 ^b Disconfirm + .29 ^b PosAffect - .25 ^a NegAffect ⁸	.32
3	Student Health Services	3	1	.6871 ² /.7796 ³ .8315 ⁴ /.9671 ⁵	6.10	Satisfaction = .57 ^a Disconfirm - .21 ^a NegAffect	.60
4	Student Health Services	3	1	.7839 ² /.8296 ³ .8734 ⁴ /.9261 ⁵	6.40	Satisfaction = .63 ^a Disconfirm - .18 ^a NegAffect	.57
5	Residence Halls-Living	3	1	.7028 ² /.8110 ³ .8213 ⁴ /.8814 ⁵	5.03	Satisfaction = .35 ^a PosAffect + .34 ^a Disconfirm - .24 ^b NegAffect	.49
6	University Book Store	3	1	.7790 ² /.8640 ³ .8371 ⁴ /.8939 ⁵	6.12	Satisfaction = -.46 ^a NegAffect + .25 ^a Disconfirm	.33
7	Residence Halls-Dining	Sample Not Analyzed Due To Improper Data Collection.					
8	Parking Services	Sample Not Analyzed Due To Improper Data Collection.					
9	Competitor Book Store	3	1	.7108 ² /.8686 ³ .8645 ⁴ /.8927 ⁵	6.10	Satisfaction = .41 ^c Disconfirm - .28 ^b NegAffect + .19 ^a PosAffect	.41
10	Residence Halls-Dining	3	1	.7758 ² /.8317 ³ .8485 ⁴ /.9251 ⁵	5.36	Satisfaction = .32 ^a PosAffect + .31 ^c Disconfirm - .18 ^a NegAffect	.39
11	Physical Plant-Cleaning	3	1	.7175 ² /.8669 ³ .8070 ⁴ /.9049 ⁵	5.73	Satisfaction = .45 ^a Disconfirm	.31
12	Safe Ride	3	1	.7203 ² /.8089 ³ .8843 ⁴ /.8283 ⁵	5.95	Satisfaction = .32 ^b Disconfirm + .26 ^a PosAffect	.22

1 Disc = Cognitive Disconfirmation
 2 Coefficient Alphas score for Positive Affect
 3 Coefficient Alphas score for Negative Affect
 4 Coefficient Alphas score for Cognitive Disconfirmation
 5 Coefficient Alphas Score for Satisfaction
 6 Disconfirm = Cognitive Disconfirmation Independent Variable
 7 PosAffect = Positive Affect Independent Variable
 8 NegAffect = Negative Affect Independent Variable
 a p ≤ .05
 b p ≤ .01
 c p ≤ .001

Reliability and Validity of the Measures

Prior to discussing the results obtained in statistical analyses, it is important to address whether or not the measures used in the current research are valid and reliable.

Correlation matrices can be used to assess the relative degree of convergent and discriminant validity in the sets of items. Table 2 presents an averaged correlation matrix of the variables used in hypothesis testing. Given the difficulties associated with obtaining discriminant validity in services measures, the intercorrelations compare quite favorably with those often found in services research (c.f., Cronin and Taylor 1992, Taylor and Baker 1994). Thus, some evidence is apparent for the validity of the measures used in the current exploratory analyses.

Reliability of the obtained measures is assessed by looking at the factor structure of the scales as well as their coefficient alpha scores (Nunnally 1978). Hypothesis 1 asserts that the affect construct is multidimensional reflecting both positive and negative emotions. Table 3 demonstrates that the affect construct consistently exhibits three factors in exploratory factor analysis, one positive and two negative factors. Thus, Hypothesis 1 is confirmed in every sample setting in the current research.

However, the position can be maintained that issues related to the factor structure of the Affect construct outside the identification of positive and negative affective influences are not relevant for purposes of the current research. The measures used to operationalize the constructs in this study are treated as indexes as opposed to scales in accordance with the recommendations of Cronin and Taylor (1992, 1994). These authors argue that the difference is that an index is an exact linear combination of observed items. The dimensionality of the items of an index used as an observed variable is not relevant because any conclusions drawn by comparing models are not invalidated by the psychometric properties of the items that compare indices. The ability to treat the measures in the current research as indexes rather than scales allows for summing-and-averaging the positive affect, negative affect, and disconfirmation sets of items into single independent variables that can then be regressed upon overall satisfaction

judgments as a dependent variable.

Table 3 further demonstrates that the coefficient α scores for the summed-and-averaged variables support the argument for reliability of the measures. Based on these standards, the samples from groups 1, 4, 10, and 12 exclude the "surprise" affective variable from the positive affect set of items and treats "surprise" as a unique independent variable.

RESULTS

The results of hypothesis testing are presented in Table 3. Readers are initially directed to the finding that it is apparent that treating "surprise" as a unique independent variable in some samples does not affect the results reported herein as the variable fails to be independently related to satisfaction judgements in any of the investigated cases. Therefore, consistent with the recommendation of Oliver (1993b), it appears that the "surprise" variable in measures of affective responses in service-based research should be treated with caution.

Hypothesis 2 states that positive affect contributes to satisfaction judgements. Hypothesis 2 is partially supported in the current research as seen in the samples obtained by groups numbered 1, 2, 5, 9, 10, and 12. Hypothesis 3 states that negative affective responses will contribute to satisfaction judgments. The results of the current research again partially support Hypothesis 3 in the samples from groups numbered 2, 3, 4, 5, 6, 9, and 10.

Hypothesis 4 assesses Oliver's (1993b) argument that negative affective responses are stronger and more salient than positive affective responses. Support for Hypothesis 4 is evident when the regression coefficient is larger for the NegAffect than the PosAffect independent variable in Table 3. Here again we see mixed results as Hypothesis 4 is supported only in the samples collected by groups 3, 4, 6, and 9. In fact, we see essentially the same amount of evidence in the current research for the alternative argument that PosAffect is more generally a stronger contributor to satisfaction judgments in the samples from groups 1, 2, 5, 10, and 12.

The final research hypothesis assesses whether cognitive disconfirmation contributes to satisfaction

judgements in marketing educational settings. Hypothesis 5 is supported in every sample collected in the current research. These results provide additional support for Oliver's (1980, 1993a) assertion that subjective disconfirmation is most closely related to satisfaction judgments. The next section investigates the implications of the reported study.

IMPLICATIONS & RECOMMENDATIONS

The results reported herein demonstrate that the level of satisfaction of students, as one of the constituencies of marketing academic institutions, with the product they receive from marketing-based program of studies can be easily measured using recent advances in satisfaction theory. This finding supports the basic argument underlying the current research that services theory can, and should, be generalized to marketing academic service settings. The results further demonstrate how such efforts in relation to satisfaction measurement can be used for pedagogical purposes in undergraduate marketing research classes.

The author of the current research adds his voice to those suggesting that marketing educators begin to consider the level of satisfaction (and quality perceptions) of stakeholder groups in efforts to produce the marketing educational product. This study demonstrates that this can be easily accomplished in student stakeholder groups, and encourages such efforts with other stakeholder groups. Given the trend in the United States toward greater accountability in the outcomes of marketing education, it is the sincere hope of the author of the current research that marketing educators begin to engage in a serious dialogue concerning how to best incorporate evolving services theory into marketing educational processes.

The results of the exploratory research reported herein can provide some initial direction in accomplishing this end. First, the mean scores for overall satisfaction in the current research range from 5.03 in the sample from group 5 (Residence Halls-Living) to 6.40 for group 4's sample concerning Student Health Services (see Table 3). Given that these values were derived using nine-point scales, it appears fair to suggest that the students assessed in the current research

perceive that there is substantial room for improvement across all of the supplemental service settings investigated. This conclusion is strengthened by the recent evidence presented by Peterson and Wilson (1992) demonstrating a consistent and general pattern of positivity bias in satisfaction research. The author of the current research is fairly suspicious that replications of the study reported herein will yield similar results in other academic settings. Capturing these indices of stakeholder satisfaction can thus provide colleges of business with ongoing strategic marketing information based on insights into the nature of affective and cognitive evaluations by key stakeholder groups. Interestingly, the R^2 values reported in Table 3 reflect good explanatory values for services research (Bolton and Drew 1991).

Second, it is intriguing that cognitive disconfirmation appears to contribute to satisfaction judgements in academic environments in every instance considered herein whereas positive and negative affect appear somewhat less robust (see Table 3). Further research appears warranted to better understand the antecedents and consequences of this phenomenon. For example, what is the nature of the factor structure of affective responses? Is there a causal ordering of affective and cognitive responses in satisfaction judgements? Is the nature of any interactions between affective and cognitive responses in satisfaction judgements additive, multiplicative, linear or nonlinear?

Third, further research appears warranted that investigates more fully where and when negative and/or positive affective responses contribute to satisfaction judgements. The results reported in Table 3 demonstrate heterogeneity within different groups of student respondents. There is no reason not to assume that such heterogeneity exists in populations of other constituencies of marketing academic services. This information may make it easier for marketing academic institutions to develop marketing strategies for key stakeholder groups based on either minimizing negative affective responses, maximizing positive affective responses, or both.

Fourth, the results reported herein further support Oliver's (1980, 1993a,b) arguments for measuring subjective disconfirmation in all efforts related to satisfaction measurement. The results

reported herein clearly suggest that students employ cognitive evaluations of the academic services they receive. Further research might consider ways of developing a better understanding of which comparison standards influence the disconfirmation component of these satisfaction judgements in academic settings (e.g., alternative forms of expectations, availability of alternatives, or norms).

Finally, we suggest that replication studies of the results reported herein be undertaken to investigate the robustness and generalizability of the results. Given the general heterogeneous nature of services, it is not unlikely that different academic institutions in different parts of the country will obtain different results. The key point of this study is that we should begin the process of seriously measuring the satisfaction levels of the key constituencies of academic institutions on an ongoing basis, and then using this information in the administrative decision-making process.

LIMITATIONS

The exploratory research reported herein has a number of limitations that readers should consider. First, only one stakeholder group (i.e., students) is investigated relative to a single academic institution making the ability to generalize the reported results an unknown risk. Second, the services selected for evaluation do not include essential services such as financial aid, and evaluations of faculty. An imperative of future efforts by administrators of marketing educational programs to overcome both of these limitations and incorporate services theory into the production of the marketing educational product will be the education of faculty as to the importance and necessity of control processes related to teaching and research. Only when faculty learn to appreciate the necessity of applying a customer focus within academics can serious efforts be undertaken to develop adequate measures for controlling the production of the marketing educational product. Critical to the success of these efforts will be the exposure of faculty and other key stakeholder groups to emerging services theory, and consequent role development.

CONCLUSION

In conclusion, the results of the exploratory study reported herein support the primary recommendation of this research that marketing/management research classes can be employed by academic institutions to aid in the achievement of integrating services theory into marketing educational practices while simultaneously serving pedagogical needs. The simple fact remains that there is clear evidence that marketing education will continually be held more accountable by stakeholder groups for the foreseeable future. If marketing educators wish to proactively participate in the process of setting these standards of accountability, then attention must be proactively directed toward developing ways of synergistically melding the goals and objectives of all relevant stakeholder groups in the delivery of marketing education.

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Appendix A The Measures

Affect Items

1	2	3	4	5	6	7	8	9
Not at				Average			Very	
All							Much	

___ **Interest** - defined as attentive, concentrating, or alert.

___ **Enjoyment** - defined as delighted, happy, joyful.

___ **Surprise** - defined as surprise, amazed, astonished.

___ **Sadness** - defined as downhearted, sad, discouraged.

___ **Anger** - defined as enraged, angry, mad.

___ **Disgust** - defined as feeling of distaste, disgusted, feeling of revulsion.

___ **Contempt** - defined as contemptuous, scornful, disdainful.

- ___ Fear - defined as scared, fearful, afraid.
 ___ Shame/Shyness - defined as sheepish, bashful, shy.
 ___ Guilt - defined as repentant, guilty, blameworthy.

Cognitive Disconfirmation Items

1 --- 2 --- 3 --- 4 --- 5 --- 6 --- 7 --- 8 --- 9
 Worse About Better
 Than I What Than I
 Expected Expected Expected

Tangibles are the physical facilities, equipment, and appearance of the employees of XYZ. Would you say that the tangibles of XYZ today were _____.

Responsiveness is the willingness of the company to help customers and provide prompt service. Would say that the level of responsiveness you received from XYZ is _____?

Assurance is the knowledge and courtesy of the employees of XYZ and their ability to inspire trust and confidence. Would you say that the level of assurance you received from XYZ is _____?

Reliability is the ability of XYZ to perform our promised services dependably and accurately. Would you say that the level of reliability you received from XYZ is _____?

Empathy is the caring, individualized attention a firm provides its customers. Would you say that the level of empathy you received from XYZ is _____?

Overall Satisfaction

1 --- 2 --- 3 --- 4 --- 5 --- 6 --- 7 --- 8 --- 9
 Strongly Neither Strongly
 Disagree Agree Nor Agree
 Disagree

I am satisfied with my decision to use XYZ as a source for ABC services.

If I had it to do over again, I would choose XYZ as the source for my ABC services.

My choice to use XYZ as the source for my ABC services was a wise one.

I feel **bad** about my decision to use XYZ as the source for ABC services.

I think that I did the right thing when I chose XYZ as my source for ABC services.

I am **not happy** that I did what I did in coming to XYZ for my ABC services.

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