SERVQUAL AND STUDENT SATISFACTION: WHAT DO THE RESPONSES MEAN?
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ABSTRACT

There has been some interest in applying SERVQUAL to the assessment of satisfaction among university students, as part of Total Quality Management efforts in academia. This exploratory study used focus groups to examine the meanings business students derive from selected dimensions of the SERVQUAL instrument. Focus group interviews substantially improved the understanding of SERVQUAL responses and provided useful information for improving the quality of student educational experiences.

INTRODUCTION

The issue of student satisfaction has become increasingly important as universities strive for accountability. This concern is partly the result of the increasingly competitive environment that universities are experiencing. It is also the result of an emerging recognition of the links between student satisfaction and post-purchase behaviors, such as complaining, recommending the institution to relatives, friends, and business colleagues, and providing donations to the university (Kotler and Fox 1995). The application of consumer satisfaction research to the services provided by a university not only has the potential of benefiting current students but can augment the efforts of the institution to market itself and obtain competitive advantage.

A very popular instrument for studying satisfaction has been the SERVQUAL instrument originated by Parasuraman, Zeithaml, and Berry (1985, 1988). The instrument in its original form employed two companion 22-item scales measuring expectations and performance. The gaps between the service the consumer thinks they have obtained and the consumer's expectations for that service define the level of service quality received. Although heavily criticized in recent years (for example, Brown and Swartz 1989; Cronin and Taylor 1992), SERVQUAL has been used extensively to study satisfaction in services industries such as health care (Babakus and Mangold 1989), financial services (Bojanic 1991), and retail stores (Finn and Lamb 1991).

Carman (1990) applied SERVQUAL in four settings, a hospital, a dental school clinic, a business school placement center, and a tire store, and found stability of the SERVQUAL dimensions across industries was impressive. However, the study indicated that services that involve multiple functions, may need separate administrations for each function. Recent modifications of the instrument attempt to remove the problems associated with gap analysis and allow for a consumer "zone of tolerance," representing the range that a consumer considers satisfactory (Parasuraman, Zeithaml, and Berry 1994).

Surprisingly, there have been few applications of SERVQUAL to the assessment of educational quality. In fact our literature survey showed only one attempt to adapt the questionnaire for studying marketing education (Ford, Joseph, and Joseph 1993). The study, which examined the quality assessments of education among American and New Zealand students, found that there were relatively few differences between the two samples in ratings. The differences that did exist were primarily in the importance placed on various dimensions by the respondents, with New Zealanders placing more importance on reliability and less on empathy and the tangible aspects of the service than Americans. Despite these differences, the relative similarity between the samples suggested that students in different environments have many common requirements upon which they base judgments of service quality.

Although there are other legitimate ways of looking at students (as products, for example), in this paper we assumed students to be the consumers of a service and that the faculty to be front-line service providers. This assumption underlies the process of student evaluation of faculty and provides a basis for applications of SERVQUAL to studying student satisfaction. We also believed that information obtained from the questionnaire would have limitations in application. While it is interesting to know about student expectations and performance evaluations, difference scores tell us little about how gaps between the two might be narrowed. The answers to this question involve ferreting out the behaviors that students associate with each SERVQUAL dimension. Therefore, this
exploratory study attempted to delineate students' understandings of a selected set of SERVQUAL items. The purpose of the project was to determine how much focus group interviews could enrich student information obtained through SERVQUAL. The final aim was to develop some specific recommendations for improving ratings of service quality in our institution.

METHODOLOGY

Sample
The sample of students participating in the focus groups (n = 22) was drawn from a population of students who had previously completed a SERVQUAL questionnaire adapted for use in a College of Business (N = 736). Student focus group participants were members of sophomore, junior, senior and graduate classes representing an array of business concentrations including marketing. They were selected to be representative of their class. That is, there was no attempt to select students from any particular ability group although there was an attempt to obtain equal gender representation in the groups. Target focus group size was 6-8 persons per group. Actual groups ranged from 2 to 10 members. The smallest group represented the senior level course, the largest group represented graduate students. The other groups contained equal numbers of students (5 per group).

Instrumentation and Procedures
The primary methodology employed in the study was focus group interviewing (Krueger 1994). All of the students in the focus groups had previously participated in a student survey that incorporated an adapted SERVQUAL questionnaire (Parasuraman, Zeithaml, and Berry 1988), presented in the original format with corresponding sets of items asking about expectations and performance. Time limitations on focus group discussions made it impossible to investigate all items, so specific items were selected from each of the SERVQUAL factors. The factors were: Tangibles (physical facilities, equipment and the appearance of personnel), Reliability (dependability and accuracy of service performance), Responsiveness (promptness and willingness to help), Assurance (employee courtesy, knowledge, and ability to inspire trust), and Empathy (individual attention and caring). Items were chosen on the basis of large computed discrepancies between expectations and actual performance relative to other items loading on each particular factor. All focus groups were conducted in a conference room by a moderator and two assistants. In order to facilitate the interview and help ensure uniformity between focus groups, a written interview schedule containing meaning probes and a question about how gaps might be narrowed was constructed for the moderator's use. Each interview began with introductions, discussion of the roles of the moderator and assistants, and presentation of instructions. After the warm-up question about reasons for coming to the College, students were read a SERVQUAL statement, asked to give a rating of the College's performance in that area on a standard Likert scale, and asked what the statement meant to them. Student responses were written on a flip chart, visible to all of the interviewees. Students were asked to respond one at a time so that their comments could be recorded. The closing question focused on which of the previously discussed issues was most important. Each focus group interview lasted approximately one hour and a quarter. All of the interviews were audiotaped.

Following the interviews, typed transcripts were created from the audiotapes, from the flip chart record, and from other notes. Content analysis of these records was conducted by reviewing the transcripts, one category at a time, and developing emerging themes from the focus group discussions. Issues in the analysis were the content of the responses, the consistency within the group, the frequency and extent of the comments, the specificity of the comments, and intensity or depth of feeling.

RESULTS

The focus group interviews produced a large amount of qualitative information. Sample results of the content analysis of this information are presented by SERVQUAL factor. Illustrative quotes are included to exemplify the kinds of data produced by the focus groups and portray areas where colleges might focus when attempting to improve student perceptions of educational quality.

Reliability
The Reliability question ('when faculty and staff promise to do something by a certain time, they do so') generated three behavioral themes: keeping promises, prevention of hassles, and an accuracy/help theme. Keeping promises was linked with professionalism by students. It tended to be construed as the faculty member consistently
handing back assignments and tests on time and being available office hours. an issue about which students spoke at length and with much feeling. A particularly thorny issue, from the student point of view, was faculty over-promising and under-delivering.

"... they [faculty] expect the student to hand things back on time, and the student should expect the professor to hand things back on time."

"I guess my biggest problem is when they say a certain date that they're gonna have it done and they don't."

"On that note, I've had teachers miss an appointment all together and just say, 'oh, I forgot.' So it's like I sit there for 45 minutes, and then they don't come. Okay, I could have been doing something else with my time."

Some promises were viewed as particularly important by students. This feeling especially applied to faculty provision of feedback on projects where the evaluation might help the student get a better grade on a subsequent project.

"I still have one part of a project to do for an accounting class. ... I am not going to get [feedback] till Wednesday, which is after I turn my final project in. So I feel there should have been more thought going into this."

The "preventing hassles" aspect of reliability was illustrated by concerns with the smoothness with which exchange programs with other universities ran. A program was viewed as reliable if the student received paper work promptly and had enough information about important areas (in this case, housing and course work) to feel secure. The "accuracy/help" dimension was connected to trust in advising. Trust in advising meant not only providing accurate information to students but being willing to "go a second mile" for students. For example:

"I was in an accident recently and I called him [advisor] and he took care of everything."

Responsiveness

The responsiveness item was: "faculty and staff are always willing to help students." Student statements in response to this item reflected the feeling that helpfulness was a general attitude on the part of faculty. Six specific areas were discussed: asistance with scheduling and program development, testing, office hours, additional faculty assistance in courses, career guidance, and creating conditions for the student to excel. In general, students felt that faculty and staff should be available, convey the impression that they want to help, and avoid creating conditions that inadvertently penalize the students. Statements illustrating testing and assistance areas include the following.

"... Write the test based on what they taught us. Do things from homework; that's what homework is about."

"I guess I've run into [situations] where I've had a whole lot of questions. ... like it seems to take up too much of their time. Even if there isn't someone waiting [during scheduled office hours], I felt like I was being rushed through because they have something else they needed to do."

"It's like being receptive. Little subtleties [show] you are more receptive."

Focus group discussions also indicated that student concerns about responsiveness differed with level of instruction, possibly reflecting the needs of students at different points in their programs. This was particularly true in the area of career guidance which graduating seniors and MBAs, more than sophomores and juniors, tended to associate with helpfulness.

Empathy

The empathy item (giving students individual attention) generated three themes: personal contact within the classroom and during office hours, general attitudes toward students, and provision of information about faculty. Behaviors associated with the first theme were accommodating the student by expanding office hours, knowing individual student's names, taking situational factors into account when dealing with students, and spending time with students. Concerns about faculty attitude involved more general statements succinctly summed by one MBA student:

"Just have them treat us as customers, not nuisances."

Empathy tended to blend in students' minds with responsiveness in that a primary indicator of "individual attention" was the time the instructor was willing to spend with the student and doing
things for the student. Undergraduate students tended to view this issue of over-all faculty attitude as the most important factor determining their satisfaction with the program.

"I think state of mind, because under [the right] state of mind all those other things fall into place."

Assurance
The assurance item, "faculty and staff of the College of Business get adequate support to do their job," was the least well understood of the items. Of the emerging themes, the most prevalent response was one of no understanding. When pressed, some students thought perhaps it might mean emotional support from other faculty members which they did not feel qualified to assess. Also mentioned (by MBAs only) were financial support, being able to obtain a GTA or grading assistant, computer and technical support, and an administration that backs up the faculty. Undergraduate students tended to alter the question in their minds to mean support for the student. One student gave a professor's response to a student request as an example of lack of support:

"I can't do this. I have to publish."

Coordination of assignments between classes was another issue that students thought was important. However, their primary concern involved meeting student needs rather than faculty and staff needs.

"Coordination of assignments is one element in that. When a professor gives an assignment, he should confer with other professors [to see] if this is overloading the students."

Tangibles
When students thought of up-to-date equipment, the principle equipment that they considered was the computer. Computer issues included the quality and modernity of the physical equipment, the quality of the software, and the abilities of the support staff. Dissatisfaction responses centered mostly on the support staff (insufficient numbers and training) and laboratory facilities (especially crowding at certain times during the term).

"I was doing a project for one of my classes and one of these guys, I asked him to do something and he did something entirely different. [He] lost the whole thing and my disk got all messed up because he just started hitting this button a million times."

"I feel the computer lab is really excellent, but it's very frustrating. . . it's impossible to find a seat down there."

Undergraduate students were often unable to differentiate between equipment and the physical facilities and their maintenance. The latter issues were of special concern for graduate students because they reflected on the image of professionalism presented by the program.

"When I think of a business building, think of something that looks really nice . . . the perception of the rooms kinda takes away from the prestige of the program."

DISCUSSION
Focus group discussions added to our understanding of the meaning our students assigned to the SERVQUAL items and provided information about specific characteristics and behaviors driving performance ratings. In particular, the tendency for dimensions to blur into concerns about the general attitude toward students has implications for improving process aspects of our services. Specifically, it suggests (consistent with Kotler and Fox 1995) that interventions should involve attention to faculty attitudes and awareness of the importance that students place on faculty/student interactions. Further, the study suggests ways to improve students' perceptions of reliability, responsiveness and helpfulness through organizational modifications.

The focus groups also showed that not all discrepancy scores were equally reliable. For instance, the Assurance item (about support of faculty) was not well understood by students, even though it was rated during the survey just as better understood statements were. The result of this interpretation failure must be that the performance/expectation gap score contains a larger amount of error than gap scores for other items.

As has been noted in the past (Peter, Churchill, and Brown 1993), reliability is a major potential problem for the use of difference scores. Without follow-up interviews the tendency might be to view all scores as equally informational.

The numbers of students involved in the focus groups described in our study were small. This may be considered a major limitation in drawing generalizations from our findings. Certainly, the
specific conditions driving discrepancies between expectations and performance could be limited to the specific institution studied, although we suspect that some are fairly generalizable to other institutions. However, the research does suggest that using SERVQUAL, and probably other surveys alone, is risky business. We propose that, where possible, such measures of satisfaction with educational experiences be supplemented with some other methodology. The focus group methodology used in this small study could be successfully employed to this end by other institutions.

REFERENCES


