Student Perceptions of the Program Component Effectiveness of a Leisure and Sport Management Program (LSM)

Jim K. Rost

Colby B. Jubenville

Follow this and additional works at: https://trace.tennessee.edu/jasm

Student Perceptions of the Program Component Effectiveness of a Leisure and Sport Management Program (LSM)

An Analysis to Examine a Total Quality Management Approach to an LSM Curriculum

Jim K. Rost
Colby B. Jubenville

Abstract

Although the trend in higher education is moving toward an emphasis on institutional mission-based funding and retention plans, little has been done to evaluate students' perceptions of academic program effectiveness and an integration of a total quality management approach to ensuring program quality. The purpose of this study was to determine what effect student perception of Leisure and Sport Management (LSM) program components had on their perception of overall program quality with regard to Deming's 14 points of Total Quality Management. Forty-eight students from a graduate LSM program completed one questionnaire, comprised of three demographic variables and 29 attitude items. Four subfactors of program component effectiveness and one factor of overall program quality were analyzed through hierarchal multiple regression. Results indicated that when controlling for gender, age, and program classification, student perception of program component effectiveness is directly related to their perception of overall program quality. Moreover, students had a positive perception of LSM program components, Academic and Career Preparation and Commitment to Academic Excellence, in particular.

Keywords: *student retention; program effectiveness; Total Quality Management*

    Jim K. Rost is director, Advising and Student Success, and a PhD candidate in the Department of Leisure, Tourism, and Sport Management at Middle Tennessee State University.
    Colby B. Jubenville is a professor of Sports Management at Middle Tennessee State University. Please send correspondence regarding this article to Jim Rost, jim.rost@mtsu.edu

Introduction

In recent years, the emphasis and importance of earning a college degree has grown exponentially. As the United States has moved into the technological age of the 21st Century, a college education has become imperative to an individual's long-term economic success (Adams, 2011). As such, public funding for institutions of higher education have also evolved from the traditional enrollment-based funding to an outcome-based model (Deaton, 2012). Although the trend in higher education is moving toward an emphasis on institutional mission-based funding and retention plans, little has been done to evaluate students' perceptions of academic program effectiveness and an integration of a total quality management approach to ensuring program quality.

As institutions of higher education are frantically creating strategic retention plans, building new facilities to improve student life, and upgrading marketing and recruitment strategies to attract new students, the university community will experience "growing pains" and will encounter new problems as it expands. Moreover, these new plans and strategies are often aimed at retention concerns with the undergraduate population and graduate programs often go unnoticed as their populations are comparatively small (Roberts, Gentry, & Townsend, 2011).

As such, Tinto (1993) found that terminal degree seekers were graduating at an average rate, and 50% of such students are not completing their doctoral programs. In many cases, the low retention or graduation rate translates into a lower graduation rate for the graduate school than in the undergraduate population (Roberts et al., 2011). Based on a declining or underachieving graduate population, it would seem prudent for an institution to empirically evaluate their graduate programs from a student's perception of program component effectiveness as well as assess their perception of overall quality (Seidman, 2005). Although graduate students often make up a smaller overall percentage of the total student body, retention and graduation rates of graduate students are included in the overall funding formula, and therefore, should not be exempt from strategic plans to increase success and decrease attrition (Pascarella & Terenzini, 1995). According to several studies in the literature, the primary factors associated with graduate student success and degree completion are student satisfaction and perception of program effectiveness and quality (see Fagen & Wells, 2004; Gaff, 2002; Phan, 2008; Wong, 2000).

There are several different departments, degree programs, and subject areas offered at many public and private institutions worldwide. For the purpose of this study, a master's and PhD program in Leisure and Sport Management (LSM) program at a large, public institution located in the Southeastern United States will be assessed for student perception of program component effectiveness and perception of overall program quality. The rationale for selecting this particular program area, is that the discipline is relatively new and among the fastest growing concentration areas in exercise science, kinesiology, physical education, and hu-

man performance departments across the country (Emery, 2010). As such, recent research has been done to examine student satisfaction and program quality in construction of these new curricula. According to Hsieh (2011), "a good learning environment is essential for productive learning. To establish a curriculum that is both educational and acceptable, student satisfaction must be incorporated into the curriculum's conception. Therefore, it becomes a necessity in the development of curricula to be aware of the learning satisfaction of students" (p. 2).

Statement of Purpose

As the literature indicates, assessing student satisfaction and overall program quality are essential when evaluating an academic program's components, commitment, and its relationship to total quality management. Moreover, as institutions place increased emphasis on student success and retention initiatives, ensuring student satisfaction and program quality are essential to accomplishing this mission. Therefore, the purpose of this study has been to determine which components of an LSM program students perceive to be effective, and if they perceive that a relationship exists between program component effectiveness and overall program quality

Research Questions

1. What effect does student perception of program component effectiveness have on their perception of overall program quality?
2. Which components of an LSM program do student perceive to be most effective?

Hypothesis

H_1: When controlling for gender, age, and program classification, a positive student perception of program component effectiveness is directly related to a positive perception of overall program quality.

Review of the Literature

Student Satisfaction and Program Effectiveness

As mentioned in the previous section, student satisfaction has been shown to be a key component in their success and predictor of degree program completion. Wong (2000) reported that student satisfaction is a product of their attitude or perception about learning activities. Moreover, if this attitude or perception is positive, or they perceive that their expectations can be achieved through the learning experience, their motivation for learning increases exponentially. Moreover, Roberts et al. (2011) identify several common themes regarding factors that impact students' perceived level of satisfaction. These include, but are not limited to: "being given the ability to make informed decisions, having mentoring opportunities that provide the opportunity to assess and evaluate one's growth and performance as a graduate student, receiving quality advisement, being provided

with career and professional development opportunities, being socialized into the academic department, understanding faculty work life, and being trained to teach at the college level" (p. 4).

As much as student satisfaction appears to have on their perception of program effectiveness, so may their dissatisfaction with program components have on their perception of program ineffectiveness. Golde and Dore (2001) report that these negative perceptions of program effectiveness manifest themselves with a perception of an inability of program components to allow them to make informed decisions prior to enrollment regarding program choice, a lack of awareness regarding career options, graduate job placement rates, and a lack of consistent up-to-date information regarding program changes. Additionally, Lovitts and Nelson (2001) found that issues such as the absence of an academic/graduate student mentor, a mismatch between student and mentor, and lack of information regarding qualifying exams and dissertation feedback had a significantly negative impact on student perception of program effectiveness, motivation to succeed, and eventual success in degree completion.

It is prevalent in the literature that assessing and evaluating students perceived satisfaction (both positive and negative) with their graduate program components is vital to ensuring the overall program and curriculum is designed for students to be successful. Roberts et al. (2011) conducted a research study using a student satisfaction questionnaire: The Student Perception of Program Effectiveness Questionnaire (SPPEQ), measuring student perception of program component effectiveness. The questionnaire was developed to measure these attitudes in a doctoral program in Higher Education Administration. The questionnaire contained one factor (student perception of program effectiveness), and four subfactors: Academic Advising (9 items), Academic and Career Preparation (7 items), Commitment to Academic Excellence (8 items), and Satisfaction with Research Classes (6 items). The subfactors measuring student perception of program effectiveness in this instrument have been shown to be a reliable measure in a graduate student population with reported Cronbach Alpha coefficients of R = .897 (Academic Advising), .940 (Academic and Career Preparation), .890 (Commitment to Academic Excellence), .932 (Satisfaction with Research Classes), (Roberts et al., 2011).

Results of their research study found that not only did students ascribe overall satisfaction with the effectiveness of the program components, but "with their relationships with faculty members in and out of the classroom" (p. 12). As such, perception of effectiveness may not only lay within the academic components of a graduate program, but with a holistic socialization lauded by retention scholars (see Pascarella & Terenzini, 2005; Tinto, 1993).

While student satisfaction has been shown to be related to student success, little has been done to study how this relates to the student's perception of overall program quality. Although quality is mentioned as a byproduct of satisfaction,

applied research in higher education (Bryan 1996; Cooper, 1998; Toma, 2012) indicate that satisfaction and quality are in fact, two individual variables in their relationship or prediction of academic success. Therefore, this study extends the research of Roberts et al. (2011) by analyzing student perception of the program's overall quality and how student satisfaction, or perception of effectiveness, affects their perception of quality. This information would be particularly useful to department chairs and other high level administrators with regards to student success and retention initiatives which have been shown to be of primary importance in the culture of higher education today (Adams, 2011).

Total Quality Management Model

As previously mentioned, the greatest challenge higher education administrator's face today is creating a competitive advantage in the marketplace for students, grant money, state funding, and private financial resources (Toma, 2012). Moreover, they may have an even more difficult time achieving fiscal solvency and increasing their world ranking because they are unable to define how they are going to provide learning opportunities to their students as "customers" and assess the quality of course delivery or customer service systematically.

According to Bryan (1996), W. Edwards Deming, Joesph M. Juran, and Philip B. Crosby have been identified as leaders in the field of Total Quality Management (TQM). As referenced by their successes overseas in remedying management and execution issues, institutions of Higher Education can apply many of these principles to correct the rampant bureaucracy and cost disease often associated with nonprofit public institutions.

Higher education continues to remain a rather bureaucratic and sluggish institution as opposed to a vibrant, multidimensional system one might find in the private sector. As such, Cooper (1998) indicates that "traditional approaches to organizational management have emphasized the analysis of individual problems and incremental change, but this will no longer suffice as companies continue to experience complex changes" (p. 2). In this regard, higher education continues to focus on assessing individual departments, curriculums, funding sources and research industry while often ignoring how these entities work together in a systematic fashion and above all, ignore their quality (Bryan, 1996).

As the literature indicates, the biggest challenge facing an administrator in higher education is the seemingly rapt adherence to "time-honored tradition" via the bureaucratic hierarchy of traditional management and assessment techniques (Tierney, 2012). As the competition for student fees, tuition, housing, and off-campus resources increase, university presidents and their administration need to look beyond tradition and broaden their horizons toward assessing quality of services provided, incorporating all of their departments in strategic planning, and including the front line non-administrative employees into decision making as described in Deming's 14 points (Butterfield, 1991). However, according to Toma (2012), universities are often too concerned with building prestige through

public rankings, expanding facilities, offering satellite campuses, developing new academic programs, and advertising as a method of increasing their competitive advantage for student recruitment, rather than inspecting the quality of the services that are being offered to their students (customers).

As the stakes increase and the landscape continues to evolve in higher education, a total quality management approach by top-level administration may be the key to its long-term survival; much as that trend has continued in business and industry. According to Lewis and Smith (1994), "renewed focus on quality in higher education has occurred because (1) the environment of higher education is changing and is going to have to accomplish more with less, (2) competition for both students and funds will continue to increase at a time when (3) we are going to have to accomplish more with less" (p. 10). Bryan (1996) reported that accomplishing more with less is a theme that generally accompanies the promotion of TQM in higher education. With a changing campus climate, higher education continues to face challenges in serving the desires and specialized needs of an every evolving new clientele. Also, the every changing landscape of technology, innovation, and delivery off information, knowledge and services will force college and universities to examine their processes more efficiently.

It would seem particularly efficacious for the university as an organization, to implement a systems-based approach such as TQM to increase its competitive advantage by offering increased quality in its learning outcomes for students, work environment/satisfaction of its faculty and staff, and inspection of the systems and processes toward that end. In other words, by increasing efficiency, product quality, increased worker morale, you can develop a superior product by not increasing cost. So while other competitors are increasing costs to generate revenue, the absence of quality will ultimately lead to an inferior product and decreased demand; thereby losing the competitive advantage, and possibly facing eventual extinction from the game altogether.

The goals and objectives to be measured in this process must center on quality of services provided, which in the case of higher education means enhancement of student learning, development, and services (Bryan, 1996). This means that the specific goals and objectives in the department must focus on quality learning outcomes, instruction, technology, learning materials, academic support and advising, and most importantly mentoring by senior faculty to develop students beyond the curriculum, but in their specific career discipline and for life.

As the literature in the previous sections indicates, student perception of satisfaction of program *effectiveness* may very well be a contributor as to how they perceive overall program *quality*. Moreover, as the assessment of program quality moves to the forefront of institutional retention strategies, it is particularly salient to determine what factors have an effect on the students' perception of overall program quality. Therefore, the purpose of this study has been to determine which components of an LSM program students perceive to be effective, and if they per-

ceive that a relationship exists between program component effectiveness and overall program quality. In addition, the results from the survey instrument used in this study, served to cross-validate results from a study by Roberts et al. (2011) that examined comparable factors in a graduate program in higher education.

Data and Methodology

Subjects

Forty-eight ($n = 48$) male and female students in a master's and doctoral level Leisure and Sport Management program participated in this study. The subjects were recruited from five different graduate courses in the LSM program. Upon an approved IRB review, the investigator obtained permission from the chair of the academic department and the program director to contact faculty of the LSM graduate courses and secure permission to attend their classes and recruit students to participate in the study. In addition, alumni from the LSM program were contacted by the investigator via email and recruited to participate. For subjects that agreed to participate, an informed consent document and questionnaire were attached to an email, the subjects completed it, and sent back to the investigator.

Measures

The subjects completed one questionnaire comprised of three demographic variables. The questionnaire contained a total of 29 items: 24 items measured student perception of the effectiveness of LSM program components, and 5 items measured student perception of overall LSM program quality.

Demographics

The demographic questions identified each participant's sex, age, classification level in the LSM program, and amount of time in the program.

Student Perception of Program Component Effectiveness

The Student Perception of Program Effectiveness Questionnaire (SPPEQ) was used to measure student perception of LSM program component effectiveness and satisfaction. This questionnaire was developed by Roberts et al. (2011) to measure similar attitudes in a doctoral program in higher education administration. The original questionnaire contained one factor (student perception of program effectiveness), and four subfactors: academic advising (9 items), academic and career preparation (7 items), commitment to academic excellence (8 items), and satisfaction with research classes (6 items).

As this instrument was originally used to measure subjects' attitudes in higher education, it was slightly modified by the investigator to reflect valid items for an LSM graduate curriculum. The investigator conducted a review of the questionnaire items by four faculty members in the LSM program, including the program director to assure content validity postmodification. The modified instrument in-

cluded the same factor and the following modified subfactors: academic advising (6 items), academic and career preparation (6 items), commitment to academic excellence (6 items), and satisfaction with research classes (6 items).

After modification, this portion of the questionnaire was comprised of 24 items, and each item is rated on a five-point Likert scale ranging from 5, *Strongly Agree*; 4, *Agree*; 3, *Neither Agree or Disagree*; 2, *Disagree;* and 1, *Strongly Disagree*. Scoring consisted of summing the subject's ratings for each item on the subfactor. The subject's score on each subfactor is the sum divided by the number of items in the subfactor.

Student Perception of Overall Program Quality

As the original SSPEQ did not have a factor to measure overall program quality, the questionnaire was further modified by the investigator to incorporate this measure into the instrument. The investigator added 5 item questions to measure subject's perception of overall program quality using 5 of Deming's 14 Principles of Total Quality Management that were specifically applicable to a graduate program in LSM as illustrated in a research study by Bryan (1996). These items were generated from Principle 1: "Create a constancy of purpose toward improvement of services and programs." Principle 2: "Adopt a continuous improvement philosophy where staff must adopt a philosophy of continuous improvement that exceeds customer (student) expectations." Principle 3: "Build quality into processes from the beginning. Student-focused programs and activities that meet or exceed goals and standards and ongoing process evaluation are all key elements to quality assurance". Principle 7: "The development of a vision, mission, and goal statement by staff, faculty, and students should be a shared process that promotes teamwork." Principle 12: "Remove barriers that hinder students in taking pride in their work or in being creative" (pp. 8-9).

As with the original modifications to the SSPEQ, the investigator conducted a review of the new factor and corresponding items. As with the original items, the Overall Program Quality factor is scored on a 1- to 5-point Likert scale: 1, *Strongly Disagree* to 5, *Strongly Agree* where all item scores are summed and divided by the number of items. As these modifications are original, reliability coefficients were performed posttest.

Procedure and Analysis of Data

Subjects were recruited from five LSM graduate courses and were given verbal information about the study, the informed consent document, and asked to complete the 29-item questionnaire. Upon completion, signed informed consent documents and complete questionnaires were housed in a secure location for analysis. In addition, LSM program alumni were contacted via email, where they were informed about the study and asked to complete the attached informed consent document and questionnaire, and then prompted to send the completed materials back to the investigator. Completed email responses were printed off and housed

in the same secure location for analysis. The independent variables were the score on each subfactor of the Student Perception of Program Component Effectiveness factor. The dependent variable was the score of the Overall Program Quality factor on the SSPEQ questionnaire. Descriptive statistics were obtained to describe the subjects and their responses on the factors and subfactors on the questionnaire as well as to examine any discriminating groups. A Cronbach's Coefficient was performed on all four subfactors as well as the one factor to measure the construct reliability of the instrument. A regression analysis was used to determine if one or more of the student perception of program component effectiveness subfactors predict an increased perception of overall program quality.

Results

Descriptive Statistics

Table 1 shows an analysis of participants that completed the SSPEQ and their corresponding demographic information, subfactor and factor means, and standard deviations. The total number of participants in the study was (n = 48). The mean scores for the factor, Overall LSM Program Quality was 3.98 (SD = 0.70), the Academic Advising subfactor 3.63 (SD = 0.77), Academic and Career Preparation subfactor 4.09 (SD = 0.52), Commitment to Academic Excellence subfactor 4.06 (SD = 0.59), and Satisfaction with Research Courses was 3.67 (SD = 0.63). Demographic groups were categorized by age: 18–24 43.75% (n = 21), 25-30 33.33% (n = 16), 30–35 10.41% (n = 5), and >36 12.50% (n = 6); Gender: men 62.88% (n = 30) and women 37.50% (n =18); and Graduation Classification Level: master's 77.08% (n = 37) and doctoral students 22.92% (n = 11). Of the 48 participants, 45 were currently enrolled students and 3 were recent graduates (within 5 years) of the master's program.

Reliability Analysis

The investigators conducted a reliability analysis utilizing Cronbach's Alpha, on each subfactor of student perception of program effectiveness and the overall program quality factor to determine the reliability and internal consistency of the instrument. The alpha coefficient for the Academic Advising subfactor was (.842), the Academic and Career Preparation subfactor (.820), the Commitment to Academic Excellence subfactor (.848), the Satisfaction with Research Classes subfactor (.898), and the Overall Program Quality factor (.907). Alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability of factors extracted from questions with multi-point formatted questionnaires or scales (e.g. 1, *strongly disagree* to 5, *strongly agree*). As the score increases, the more reliable the generated scale is. It is widely accepted in the research that a minimum value of 0.7 is an acceptable reliability coefficient (Santos, 1999).

Table 1

Characteristics of Participants who Responded to the SSPEQ
(N = 48)

Characteristic	M	SD
Academic Advising	3.63	0.77
Academic and Career Preparation	4.09	0.52
Commitment to Academic Excellence	4.06	0.59
Satisfaction with Research Courses	3.67	0.63
Overall LSM Program Quality	3.98	0.70
	n	%
Age		
18-24	21	43.75
25-30	16	33.33
30-35	5	10.41
36+	6	12.50
Gender		
Female	18	37.50
Male	30	62.50
Graduate Classification Level		
Master's	37*	77.08
Doctoral	11	22.92
Current Students	45	93.75
Alumni	3	6.25

*Note: Three Master's participants were recent Alumni

Hierarchal Multiple Regression Analysis

A hierarchical multiple regression analysis was used to determine the predictive value of the independent variables: subfactors of Academic Advising, Academic and Career Preparation, Commitment to Academic Excellence, and Satisfaction with Research Classes on the dependent variable: Overall LSM Program Quality. Results of the regression analysis are shown in Table 2. The results demonstrated a significant main effects model with an R square value of (.653). The reference group categories in this analysis were: participant's age 18–24, master's

level students, and men. The first main effect, Academic Advising, indicated that having a positive perception of program academic advising is positively related to a positive perception of overall program quality ($\beta = .408$, $p < .05$). The second main effect, Academic and Career Preparation, indicated that having a positive perception of program academic and career preparation is positively related to a positive perception of overall program quality ($\beta = .372$, $p < .05$). The third main effect, Commitment to Academic Excellence, indicated that having a positive perception of program commitment to academic excellence is positively related to a positive perception of overall program quality ($\beta = .318$, $p < .05$). The final main effect, Graduate Classification Level, indicated that having a doctoral student classification is positively related to a positive perception of overall program quality ($\beta = .337$, $p < .05$).

Table 2

Summary of Hierarchical Regression Analysis for LSM Program Component Variables Predicting Overall LSM Program Quality (N = 48)

Variable	B	SE B	b	p
Main Effects:				
Constant	-1.952	0.830		.023
Academic Advising	0.374	0.115	0.408	.002
Academic and Career Preparation	0.500	0.159	0.372	.003
Commitment to Academic Excellence	0.379	0.163	0.318	.025
Graduate Classification Level				
Doctoral	0.559	0.176	0.337	.003
Master's (Reference)				

From these results, it appeared that the control variable, Graduate Classification Level was having a suppressive effect on the Satisfaction with Research Classes subfactor. However, this interaction did not increase explained variance when introduced into the regression model. Therefore, an additional analysis was performed to explain this anomaly in the data.

Analysis of Variance (ANOVA)

Due to the apparent suppression of the satisfaction with research course variable due to graduation classification level as a significant main effect into the regression model, an Analysis of Variance (ANOVA) was used to determine significant differences between the two categories of graduate classification level (doctoral and master's) and the satisfaction with research courses subfactor. Results of the ANOVA main effects model demonstrated significant differences between doctoral and master's level students perceived satisfaction with research courses [F (1, 47) = 5.889, p < .05]. The mean for doctoral students (M = 4.06, SD = .327) indicates a higher Satisfaction with Research Classes than master's level students (M = 3.55, SD = .658). As the master's students had more participants (n = 37) than doctoral students (n = 11), their attitude scores may have suppressed the Satisfaction with Research Classes subfactor as a predictor of overall program quality.

Discussion

The investigators were able to accept the research hypothesis and answer the first research question as the analysis demonstrated that graduate student perception of LSM program component effectiveness was directly related to their perception of overall LSM program quality when controlling for gender, age, and program classification. Although the subfactor for Satisfaction with Research Classes was not a significant predictor of overall LSM program quality, additional analysis indicated that the control variable, Graduate Level Classification, suppressed the predictive value of the variable. Therefore, this subfactor may be a positive predictor for overall LSM program quality for Doctoral students, and a negative predictor in Master's level students. The analysis also demonstrated acceptable reliability and internal consistency as indicated by acceptable Cronbach's Alpha coefficients. These results were comparable to the Alpha coefficients reported by Roberts et al. (2011), indicating that the SSPEQ appears to be a reliable instrument for measuring student perception of program component satisfaction and overall program quality among graduate students.

Although the analysis demonstrated that student perception of LSM program component effectiveness was directly related to overall LSM program quality with acceptable explained variance, results should be viewed with caution as the n for the sample was quite small (n = 48), and therefore, is not easily generalizable to all LSM programs. However, the results of this study strongly reinforced the results of Roberts et al. (2011) who identified several common themes regarding factors that impact students' perceived level of satisfaction. These include, but are not limited to: receiving quality advising services, educational and professional development, socialization, effective mentoring, and proper research facilities and instruction.

The second research question was answered as results demonstrated that students in the graduate LSM program had a positive perception of LSM program

components. However, as there was a significant disparity between master's and doctoral students' perception of satisfaction with research courses, additional examination utilizing a mixed-model approach for example, may produce additional information to evaluate this discrepancy in greater detail. Moreover, as Master's students were not examined in the study by Roberts et al. (2011), further investigation of this dichotomy across multiple programs and universities may demonstrate a need for program administrators to evaluate the requirements and delivery of the research courses to master's level students.

In this sample, results also indicated that the participants perceived the overall quality of the LSM program to be quite high, indicating that the LSM administration of this specific graduate program is moving (or has moved) forward in implementing a total quality management structure. As such, this approach is aligned with the research by Bryan (1996) who reported goals and objectives to be measured in this process must center on quality of services provided which in the case of higher education means enhancement of student learning, development and services.

Limitations

The primary limitation to this study was a small sample size of current LSM graduate students ($n = 45$). Although the sample represented 82% of the current Leisure and Sport Management graduate student population ($n = 55$), and as discussed in the results section, had acceptable Cronbach's alpha levels, the results may not be generalizable to other graduate programs within the department, college, or university. Moreover, as the sample was only taken from one institution, the results also may not be generalizable to other Leisure and Sport Management programs at other institutions.

While it has been illustrated that student perception of LSM program component effectiveness was directly related to overall LSM program quality at this institution, and the SSPEQ was a valid and reliable instrument to measure these factors, future research and cross-validation with larger and more diverse university settings must be done to allow for a true generalizability of this model in university graduate programs. As such, this study was successful in finding a predictive relationship among its factors, but only in a very small sample of the overall campus community. Moreover, as there appeared to be a significant difference in satisfaction with research courses between doctoral and master's level students, this relationship needs further examination and analysis as well.

As a result of this study, the practical applications for the use of the SSPEQ in institutions of higher education may be wide ranging. By assessing student perception of program quality, deans, department chairs, and program administrators can determine empirically where their faculty, facilities, or mission needs to be improved, or altered, in order to enhance the overall student experience. This approach is consistent with the research findings of Roberts et al. (2011), Bryan (1996), Lovitts and Nelson (2001), and Hsieh (2011), which indicate that

creating a positive learning environment is crucial to student success, and a positive student perception of program components should be a major emphasis on structuring the course curriculum. Moreover, as the assessment of program quality moves to the forefront of institutional retention strategies, it is particularly salient to determine what factors have an effect on the student's perception of overall program quality to increase probabilities for retention and graduation. From this standpoint, student perception must and should continue to be a focal point in developing and delivering effective education programs. If we believe that students' attitudes about learning are directly tied to their satisfaction of learning, we should choose educational activities which are grounded in meeting the expectations of the student. More specifically, faculty and administrators should pay close attention to the components that comprise the program and the perception of those components by the student. In this case that would include: academic advising; academic and career preparation; commitment to academic excellence; and satisfaction with research courses.

References

Adams, C. (2011). Colleges try to unlock secrets to student retention. *Education Week, 31*(1), 16–17.

Bryan, W. A. (1996). What is total quality management? *New Directions for Student Services, 76*(1), 3–15.

Butterfield, R. W. (1991). Deming's 14 points applied to service. *Training, 1*(1), 50–59.

Cooper, B. (1998). Systems thinking: A requirement for all employees. *CSWT Papers.* Retrieved from www.workteams.unt.edu/reports/bcooper.html.

Deaton, R. (2012). Tennessee's outcomes-based funding formula. Retrieved from http://www.state.tn.us/thec/.

Emery, P. (2010). Past, present, future major sport event management practice: The practitioner perspective. *Sport Management Review, 13*(1), 158–170.

Fagen, A. P., & Wells, K. M. S. (2004). The 2000 national doctoral program survey: An online survey of students' voices, In D. H. Wulff, A. E. Austin, & Associates (Eds.), *Paths to the professorate* (pp. 74–91). San Francisco, CA: Josey-Bass.

Gaff, J. G. (2002). The disconnect between graduate education and faculty realities: A review of recent research. *Liberal Education, 88*(3), 6–13.

Golde, C. M., & Dore, T. M. (2001). At cross purposes: What the experiences of doctoral students reveal about doctoral education. Retrieved from http://www.phd-survey.org.

Hsieh, K. (2011). A study of students' perceptions of teaching effectiveness in selected sport management courses at selected college and universities in Taiwan. Retrieved from http://search.proquest.com/docview/1221050187?accountid=4886.