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QUALITY OF COLLEGE LIFE (QCL) OF STUDENTS:  
DEVELOPING AND VALIDATING A MEASURE OF  
WELL-BEING

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**ABSTRACT.** This paper reports a study designed to develop and validate a measure of quality of college life (QCL) of students. Using a theoretical model based on a build-up approach to QCL, the authors provide an empirical examination of various hierarchical components and their properties. The method is executed in two stages. The first stage is used to clarify the particular elements for inclusion in the model. The second phase uses a sample of students drawn for the campuses of three major universities in the United States. These samples were used to test several hypotheses regarding the model and its components. The results generally provide support. Finally, the discussion centers on the value of the model in application by both university officials and public policy officials in the at-large community.

**KEY WORDS:** college student quality of life, college student well-being, quality of college life of students, university student quality of life, university student well-being

Before discussing the construct and measures of quality of college life (QCL) of students, we need to make a distinction between three types of studies involving college students and quality of life (QOL): (a) studies examining relationships between students' QOL and factors such as personality, health, and the environment, (b) studies developing QOL measures specifically adapted to college students, and (c) studies developing measures of *QCL* of students.

There are many studies investigating the relationship between QOL of college students and other factors such as personality, health, and the environment (e.g., Pilcher, 1998; Makinen and Pychyl, 2001; Cha, 2003; Smith et al., 2004; Vaez et al., 2004; Chow, 2005; Ng, 2005). For example, Vaez et al. (2004) found a positive relationship between perceived QOL and self-rated health of college students. Cha (2003) found relationships between subjective well-being and personality constructs such as self-esteem, collective self-esteem, and optimism. Pilcher (1998) conducted a study showing how affect and daily events predict life satisfaction among college students.

The second genre of studies focuses on developing well-being measures specially adapted for college students (e.g., Witmer and Sweeney, 1992; Roberts and Clifton, 1992; Royal and Rossi, 1993; Disch et al., 2000; Cohen et al., 2001; Maggino and Schifini D'Andrea, 2003). These studies focus on the QOL of college students at large. For example, Cohen et al. (2001) have used the Bloom's taxonomy (Bloom et al., 1956, 1971) to develop a "cognitive domain" measure of student QOL. Bloom's taxonomy involves six dimensions known as knowledge, comprehension, application, analysis, synthesis, and evaluation (cf. Clifton et al., 1996). Roberts and Clifton (1992) developed and validated a measure capturing affective QOL of college students (cf. Benjamin, 1994). Other QOL measures developed specifically for college students include the Wellness Evaluation of Lifestyle (WEL) measure (Witmer and Sweeney, 1992), the Student Quality of Life and Satisfaction (SQOLAS) measure (Disch et al., 2000), and the Maggino and Schifini D'Andrea measure (Maggino and Schifini D'Andrea, 2003). Specifically, the WEL measure is a case in point. It involves 16 dimensions categorized into five major life tasks: (a) spirituality (a profound depth of appreciation for life); (b) self-regulation (effectiveness in coping with self); (c) work, recreation, and leisure (ability to integrate a lifestyle); (d) friendship; and (e) love (recognition of social interdependence).

The SQOLAS measure (Disch et al., 2000) is based on 10 dimensions that are directly related to students' concerns and anxiety: (a) drug and alcohol consumption, (b) social and sexual behavior, (c) use of time, (d) consumer and finance issues, (e) physical and mental issues, (f) multicultural and gender issues, (g) learning style, (h) career and employment issues, (i) crime and violence issues, and (j) living issues.

The Maggino and Schifini D'Andrea measure (Maggino and Schifini D'Andrea, 2003) involves three dimensions: (a) motivation toward studying, (b) scholastic performance, and (c) satisfaction in life domains. *Motivation toward studying* refers to students' future expectations (the brighter the future the higher the motivation toward studying), motivation to learn (inclination to persevere in the face of adversity and failure and disinclination of not dropping out of college), and self-evaluation in relation to study achievements (the more positive the self-evaluations the higher the motivation toward studying). *Scholastic performance* involves two sub-dimensions, namely real and perceived performance. Real performance refers to scholastic indicators of performance such as grade point average, exam scores, and proportion of successful exams. Perceived performance involves students' assessment of their scholastic performance compared to several standards of comparisons such as students' perceptions of other

students, students' perceptions of their own potential, students' future expectations of performance. Finally, the *satisfaction in life domains* involves ratings of satisfaction in 10 life domains such as friendship, free time, family relationship, personal health, family health, faculty, family financial situation, university career, personal financial situation, and university friendship.

It should be noted that college life of students is only one of many life domains that plays an important role in overall happiness, life satisfaction, or subjective well-being. Chow's (2005) study showed a significant relationship between many of these other domains and life satisfaction of students at a university in Canada. Positive and negative affect invested in other domains (e.g., family, home, community, spiritual, social, and emotional) play a significant role too. Our focus in this study is on the college life domain. The goal is to develop a well-being measure that can effectively capture the QCL of students, *not* an overall QOL measure of college students. No studies were identified in the literature that produced a valid well-being measure focusing on the QCL of students. Our attempt to develop a QCL measure is also motivated by practical concerns, namely how can university administrators use this measure and its data to enhance QCL of their student population. This practical perspective has guided us to develop the following conceptual model of QCL.

#### 1. A CONCEPTUAL MODEL OF QCL

The conceptual model is shown in Figure 1. As shown in the figure, QCL is hypothesized to be determined by positive and negative affect in two types of student experiences in college, namely satisfaction with the academic aspects of the college and the social aspects. Satisfaction with the academic aspects, in turn, is hypothesized to be influenced by satisfaction with university facilities and services. Similarly, satisfaction with the social aspects is hypothesized to be influenced by satisfaction with university facilities and services. We will elaborate on these hypotheses in the following sections. However, before describing the model's constructs, measures, and relationships, the reader should note that the development of the conceptual model was assisted by a focus group conducted at a major university involving 15 undergraduate students in a marketing research class.

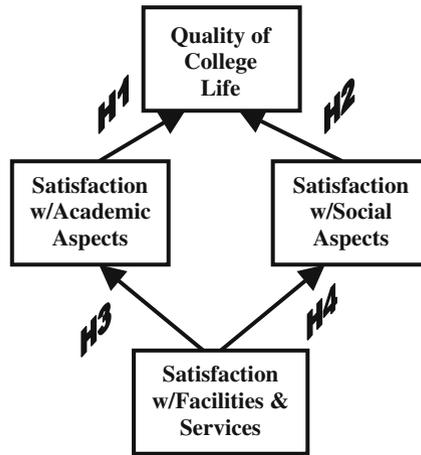


Fig. 1. The conceptual model of QCL.

### 1.1. *Quality of College Life (QCL)*

We defined QCL in terms of overall feelings of satisfaction a student experiences with life at the college. We asked our focus group members to think about their own global feelings about life at the college using questions such as:

1. In general, how satisfied are you with the overall QCL at (College/University); that is, your academic and social life on campus?
2. How satisfied are you with the overall QOL for you personally at (College/University)?
3. How satisfied, would you say, most of your friends and other classmates are with the overall QOL at (College/University)?

We used the exact same questions to capture the QCL in testing the nomological (predictive) validity of the measures. The scales accompanying these items were 5-point rating scales varying from “very dissatisfied” to “very satisfied.”

The next research question we asked our focus group members is “What determines this overall or global feeling of satisfaction with life experiences at the college.” The focus group members alluded to satisfaction with the academic and social experiences at the college.

## 1.2. *Satisfaction with the Academic Aspects of the College*

We asked our focus group members to elaborate on their satisfaction with the academic aspects of the college. Their responses alluded to the notion that academic aspects may involve experiences with faculty, teaching methods, the classroom environment, the workload, the academic reputation of the college, and academic diversity. Based on the responses, we developed a formative measure of this construct involving the following dimensions and indicators:

### 1.2.1. *Satisfaction with Faculty*

1. Quality of teaching
2. Accessibility of faculty
3. Professors knowledge of subject

### 1.2.2. *Satisfaction with Teaching Method*

1. Use of technology
2. Interaction in classroom

### 1.2.3. *Satisfaction with Classroom Environment*

1. Location (i.e., where classrooms are located)
2. Seating
3. Proper lighting/acoustics
4. Class size (number of students)
5. Classroom climate control

### 1.2.4. *Satisfaction with Student Workload*

1. Overall workload
2. Level of difficulty

### 1.2.5. *Satisfaction with Academic Reputation*

1. Reputation of university
2. Reputation of professors

### 1.2.6. *Satisfaction with Academic Diversity*

1. Multicultural diversity in faculty
2. Ethnic diversity among students
3. Gender diversity among students
4. Multicultural diversity at university

Five-point rating scales (varying from “very dissatisfied” to “very satisfied”) were used to capture response in the validation study.

### 1.3. *Satisfaction with the Social Aspects of the College*

Similar to the academic aspects of the college, we asked our focus group members to elaborate on their satisfaction with the social aspects. Their responses alluded to the notion that social aspects may involve experiences with on-campus housing, international studies programs and services (especially for international students), spiritual programs and services, clubs and parties, collegiate athletics, and recreational activities. Based on the responses, we developed a formative measure of this construct involving the following dimensions and indicators:

#### 1.3.1. *Satisfaction with On-Campus Housing*

1. The quality of on-campus housing
2. Maintenance of on-campus housing
3. Security of on-campus housing
4. Location and convenience of on-campus housing
5. The lottery process used to assign students to dorms and rooms
6. Dorm activities

#### 1.3.2. *Satisfaction with International Programs and Services*

1. Services offered by international center
2. International programs offered
3. Information provided by international center
4. The approach that each department has taken towards encouraging study abroad

#### 1.3.3. *Satisfaction with Spiritual Programs and Services*

1. University support for spiritual life
2. Spiritual life organizations
3. On-campus worship services

#### 1.3.4. *Satisfaction with Clubs and Parties*

1. Greek life
2. Selections of clubs
3. Club experience

#### 1.3.5. *Satisfaction with Collegiate Athletics*

1. Intercollegiate athletics overall
2. Mens' intercollegiate athletics
3. Womens' intercollegiate athletics
4. Athletic fields
5. Sporting events

#### 1.3.6. *Satisfaction with Recreational Activities*

1. Arcade
2. Rec sponsored activities
3. Intramural Sports
4. Concerts on campus

Five-point rating scales (varying from “very dissatisfied” to “very satisfied”) were used to capture response in the validation study.

#### 1.4. *The Influence of Satisfaction with Academic Aspects and Social Aspects on QCL*

The focus group revealed that student satisfaction with academic and social aspects of the college does indeed influence their overall feelings about their college life. This observation is also supported by much research in QOL studies related to *bottom-up spillover theory* (e.g., Andrews and Withey, 1976; Campbell et al., 1976; Diener, 1984; Diener et al., 1999; Sirgy, 2001, 2002). The basic premise of bottom-up theory is that life satisfaction is functionally related to satisfaction with all of life's domains and sub-domains. Life satisfaction is thought to be on top of an attitude (or satisfaction) hierarchy. Thus, life satisfaction is influenced by satisfaction with life domains (e.g., satisfaction with community, family, work, social life, health, and so on). Satisfaction with a particular life domain (e.g., satisfaction with college life), in turn, is influenced by lower levels of life concerns within that domain (e.g., satisfaction with the academic aspects of college life). Thus,

the greater the satisfaction with the academic aspects of college life (e.g., faculty, teaching methods, classroom environment, student workload, academic reputation, and academic diversity), as well as satisfaction with the social aspects of the college (e.g., on-campus housing, international programs and services, clubs and parties, collegiate athletics, and recreational activities), the greater the satisfaction with college life (i.e., QCL). Furthermore, the greater the QCL, social life, family life, work life, spiritual life, etc., the greater the satisfaction with life overall (e.g., life satisfaction, perceived QOL, happiness, and subjective well-being). From this discussion we can deduce two testable hypotheses:

**H1:** The greater the student's satisfaction with the academic aspects of the college, the higher the student's QCL.

**H2:** The greater the student's satisfaction with the social aspects of the college, the higher the student's QCL.

Empirical support for these hypotheses should provide some semblance of nomological (predictive) validity of the measures capturing the related constructs.

### 1.5. *Satisfaction with College Facilities and Basic Services and Their Influence on Satisfaction with the Academic and Social Aspects of the College*

The focus group also indicated that QCL may be influenced by satisfaction with college facilities (e.g., book store, telecommunications, and recreation center) and basic services (e.g., library services, transportation and parking services, healthcare services). However, the effect on QCL may be indirect rather than direct. That is, satisfaction with facilities and basic services tend to affect satisfaction with both academic and social aspects of college life, which, in turn, plays a major role in determining QCL.

Based on the focus group findings, we developed a formative measure of *satisfaction with college facilities and services* as follows:

#### 1.5.1. *Satisfaction with Library Services*

1. Library overall
2. Library staff
3. How the library is organized
4. Library reference section
5. Reserve desk
6. Availability of materials

*1.5.2. Satisfaction with Transportation and Parking Services*

1. The parking situation on campus
2. The transportation situation on campus

*1.5.3. Satisfaction with Healthcare Services*

1. Overall healthcare services offered at (School)
2. Healthcare staff
3. Health center atmosphere
4. Health center prices – overall (i.e., base fee, RxS)

*1.5.4. Satisfaction with Book Store*

1. Campus book store overall
2. Stocking of books in store

*1.5.5. Satisfaction with Telecommunications*

1. Availability of the technological systems (i.e., Computer labs, systems, TVs, etc.)
2. The quality of the technological systems (i.e., Computer systems, cable, etc.)
3. The quality of telecommunications (i.e., voice mail, long distance, etc.)

*1.5.6. Satisfaction with Recreation Center*

1. (Rec. Center) overall
2. Hours of operation at (Rec. Center)
3. (Rec. Center) facilities
4. (Rec. Center) staff

In relation to satisfaction with facilities and services, 5-point rating scales (varying from “very dissatisfied” to “very satisfied”) were used to capture responses in the validation study.

Based on the preceding discussion and the description of the measures of satisfaction with facilities and services, we subjected the following hypotheses to empirical testing:

**H3:** The greater the student's satisfaction with facilities and services, the higher the student's satisfaction with the academic aspects of the college.

**H4:** The greater the student's satisfaction with facilities and services, the higher the student's satisfaction with the social aspects of the college.

Empirical support for these hypotheses should provide additional nomological (predictive) validation of the measures capturing the related constructs.

## 2. METHOD

To test the nomological (predictive) validity of the QCL measures and the antecedent constructs and measures, we tested the four hypotheses in the context of three major universities. In particular, we focused on students' experiences with the university that they attend to obtain their undergraduate degree. We used exactly the same collection method (survey administered in business classes) at the three universities. We also used exactly the same survey questionnaire with very minor variations to identify the specific university services and facilities by name.

We selected these universities for two reasons. First, we intended to increase variance in our measures by choosing three somewhat dissimilar universities. One university is a smaller private school (St. Thomas University in Minneapolis, Minnesota, USA), one university is a large state school (Virginia Polytechnic Institute and State University, Virginia, USA), and the third is a medium-size "Ivy League" school (College of William and Mary, Virginia, USA). Second, we intended to reduce extraneous effects by choosing a homogenous set of respondents. Here, all student respondents were undergraduate students in business.

### 2.1. *Data Collection and Sample Characteristics*

The survey administration was web-based. Students enrolled in undergraduate business-related courses were asked to participate in this study for extra credit. This convenience sampling method provided a total sample of 741 respondents, proportionate to the population of the student body of the three universities. Respondents varied in age ( $M = 20.5$ ,  $SD = 1.76$ ), gender (46% male, 54% female), resident status (73.5% in state, 26.5% out of state), and grade point average ( $M = 3.06$ ,  $SD = 0.47$ ) representing a wide range of undergraduate students. Respondents were varied some across the three universities (see Table I), prompting us to treat age, gender, resident

status, and grade point average as control variables in the data analysis to rule out potential respondent bias.

2.2. *The Survey Questionnaire*

At the core of the survey instrument were 70 items measuring QCL, satisfaction with the academic aspects of the college, satisfaction with the social aspects of the college, satisfaction with the college facilities, and satisfaction with the college basic services. Responses to all satisfaction measures were captured on 5-point rating scales with anchor points ranging from “very dissatisfied” to “very satisfied.” Other, single-item scales measured the respondent age, gender, resident status, and grade point average. These demographic items were placed at the end of the questionnaire. The exact measures and their scaling properties were described in the front part of the paper.

2.3. *Measurement Validation Procedure*

In regards to the multi-item measures, each set of items is formative of its first order factor. For example, satisfaction with faculty of the academic institution was measured by asking respondents about their satisfaction with the quality of teaching, accessibility of faculty, and professor’s knowledge of the subject. The mean score of these items was then used as measure of the respondent’s satisfaction with the faculty of the academic institution.

The independent variables were hypothesized to have a more complex underlying factor structure. For example, satisfaction with faculty, the teaching method, classroom environment, student workload, academic reputation, and academic diversity are viewed as comprising a higher-order factor (satisfaction with the academic aspects). This corresponds to a

TABLE I  
Sample demographics

Variable	University 1	University 2	University 3
Age	<i>M</i> = 19.87 (SD = 1.66)	<i>M</i> = 21.33 (SD = 1.84)	<i>M</i> = 21.08 (SD = 0.99)
Gender	36% male	60% male	49% male
Resident status	71% in-state	70% in-state	86% in-state
Grade point average	<i>M</i> = 3.07 (SD = 0.49)	<i>M</i> = 2.98 (SD = 0.43)	<i>M</i> = 3.36 (SD = 0.37)
<i>N</i>	406	217	136

Notes. *M* = mean, SD = standard deviation.

second-order confirmatory model in which the observed items are hypothesized to form the six first-order factors. The first-order factors, in turn, originate from a second-order factor. Similarly, satisfaction with on-campus housing, international programs and services, spiritual programs and services, clubs and parties, collegiate athletics, and recreational activities comprise a student's satisfaction with the social aspects of the college. Satisfaction with library services, transportation and parking services, healthcare services, the college book store, telecommunication systems, and recreation facilities reflect satisfaction with facilities and services.<sup>1</sup>

To test this higher-order factor structure we used a two-step approach. First, we subjected all scale items for each second-order factor to a confirmatory factor analysis to verify the hypothesized first-order factor structure. Second, we estimated the second-order factor model using structural equations. The fit indices for this model are shown in Table II. The results indicate that each model individually, as well as the structural model as a whole, had a satisfactory fit with the data, and the relevant second-order factor loadings were large and significant. In sum, the findings of confirmatory factor analysis reflect support for our conceptualization of the second-order constructs. Hence, this factor structure was used to generate scores for the variables involved in the hypothesis-testing.

### 3. RESULTS OF HYPOTHESIS TESTING

Table III shows the descriptive statistics and the correlation matrix for the four research variables. The variable means are all below "4," with one being below "3" ( $M=2.87$ ). The standard deviations for these variables range from 0.45 to 0.73 ( $M=0.65$ ), indicating a substantial amount of variance and normally distributed responses. The correlations in Table III provide an initial test of the four hypotheses. All hypotheses are supported at the  $p < 0.01$  level.

The most appropriate analytic approach to test our model is structural equation modeling – this data analytic technique enables the simultaneous testing of all the hypothesized relationships. Furthermore structural equation modeling allows the testing of mediating effects.

Table IV shows the estimated parameters and  $t$ -statistics associated with the hypotheses. The results show good support for our model. All of the hypothesized paths are significant ( $p < 0.01$ ) (see Table IV). The proposed structural model's RMR of 0.06, GFI of 0.92, AGFI of 0.90, CFI of 0.85, and RMSEA of 0.06 indicate a good fit. The squared multiple correlations (SMCs)

TABLE II  
Second-order factor model for independent variables

First-order factor	Second-order loadings*	t-value
<i>Satisfaction w/academic aspects</i>		
Faculty	0.59	fixed
Teaching method	0.63	12.33
Classroom environment	0.59	11.78
Student workload	0.51	10.71
Academic reputation	0.53	10.97
Academic diversity	0.50	10.49
<i>Satisfaction w/social aspects</i>		
On-campus housing	0.68	fixed
Spiritual programs/services	0.48	11.09
Clubs and parties	0.66	14.55
Collegiate athletics	0.59	13.31
Recreational activities	0.69	15.07
<i>Satisfaction w/facilities and services</i>		
Library services	0.55	fixed
Transportation/parking services	0.43	8.93
Healthcare services	0.41	8.68
Book store	0.41	8.65
Telecommunications	0.54	10.63
Recreation facilities	0.53	10.45
<i>Fit indices</i>		
$\chi^2 = 415.2, df = 116$		
RMR = 0.05		
GFI = 0.93		
AGFI = 0.91		
CFI = 0.89		
RMSEA = 0.06		

Notes. \*Standardized path coefficients.

for the endogenous variables are all high:  $SMC_{QCL} = 0.23$ ,  $SMC_{SAA} = 0.52$ , and  $SMC_{SSA} = 0.65$ . Overall, the proposed structural model performed well.

Table IV also shows the hypothesis-testing results. All four hypotheses were empirically supported. Satisfaction with the academic aspects of college had a significant positive effect ( $\gamma = 0.35, p < 0.01$ ) on QCL [H1]. Similarly, satisfaction with the social aspects of college had a significant positive effect ( $\gamma = 0.18, p < 0.01$ ) on QCL [H2]. These two factors explained 23% of the variance in QCL.

As hypothesized, satisfaction with the academic aspects of college ( $\gamma = 0.72, p < 0.01$ ) and satisfaction with the social aspects of college ( $\gamma = 0.81,$

TABLE III  
Correlations, means, and standard deviations

Variable	QCL	SAA	SSA	SFS
QCL	1.00			
SAA	0.40	1.00		
SSA	0.31	0.45	1.00	
SFS	0.40	0.47	0.49	1.00
<i>Sub-sample 1</i>				
Mean	3.67	3.77	3.41	3.11
SD	0.74	0.45	0.47	0.51
<i>Sub-sample 2</i>				
Mean	3.94	3.65	2.87	3.44
SD	0.63	0.51	0.96	0.60
<i>Sub-sample 3</i>				
Mean	3.88	3.99	3.69	3.50
SD	0.59	0.39	0.58	0.45
<i>Pooled sample</i>				
Mean	3.79	3.78	3.30	3.28
SD	0.69	0.47	0.73	0.56

*Notes.* All correlations are significant at the 0.01 level (two-tailed). QCL = Quality of College Life. SAA = Satisfaction with Academic Aspects. SSA = Satisfaction with Social Aspects. SFS = Satisfaction with Facilities and Services.

$p < 0.01$ ) were positively predicted by satisfaction with facilities and services [H3, H4]. Satisfaction with facilities and services explained 52% of the variance in satisfaction with academic aspects and 65% of the variance in satisfaction with social aspects. Finally, the data showed that none of the controls variables had any predictive effect, as expected (see Table IV).

#### 4. DISCUSSION

The college student population has continued to grow as the children of the “Baby Boomers” reach college age in growing numbers. In the fall of 2005 the largest and most diverse group yet, hit campuses across the United States (Kronholz, 2005). While the number of students continues to grow, the ever tightening financial resources for many schools continue to require universities to make critical decisions on how to optimally allocate those resources. On top of that, private universities and public universities alike have increased competition for the “best students.” These are the students that can significantly impact the school’s rank in the prestigious rankings

TABLE IV  
Proposed structural model estimation results

Hypothesis	Relationship	Path coefficient*	t-value
H1	SAA → QCL	0.35	5.97
H2	SSA → QCL	0.18	3.40
H3	SFS → SAA	0.72	9.00
H4	SFS → SSA	0.81	9.04
<i>Control variables</i>			
GPA	→ QCL	0.02	0.54
Resident status	→ QCL	-0.01	-0.37
Age	→ QCL	-0.03	-0.79
Gender	→ QCL	0.01	0.22
<i>Fit indices</i>			
$\chi^2 = 668.3, df = 206$			
RMR = 0.06			
GFI = 0.92			
AGFI = 0.90			
CFI = 0.85			
RMSEA = 0.06			
<i>Squared multiple correlations</i>			
QCL = 0.23			
SAA = 0.52			
SSA = 0.65			

Notes. \*Standardized. QCL = Quality of College Life. SAA = Satisfaction with Academic Aspects. SSA = Satisfaction with Social Aspects. SFS = Satisfaction with Facilities and Services

game (U.S. News and World Report, etc.). Add to that, the need by state schools to get any type of student who can qualify for admission so that college or university continues to attract FTE dollars from the states. Bottom line is that it is a very “high stakes game” indeed. Universities have spent copiously on such things as student unions, health clubs, and food courts in the hopes of boosting the appeal of the university. Such an appeal clearly centers not only on the traditional “academic” component, but also on broader and more varied aspects of QCL. The use of this entire portfolio of QCL components by colleges and universities in their promotions and recruiting demonstrates an increasing recognition by universities as to the value of *all* the components that may contribute to a prospective (or current) student’s QCL. The issue then becomes one of how can universities and public policy officials alike, improve the definition, measurement, and

management of this crucial construct to better serve college students. This is what we tried to do in this paper.

Specifically, our conceptualization of QCL is based on the notion that global satisfaction with college life is determined by satisfaction with academic and social aspects of college, which in turn are influenced by satisfaction with college facilities and services. The results of confirmatory the factor analysis and the hypothesis testing provided good support for our conceptualization of QCL and therefore the nomological (predictive) validity of all the QCL measures.

Our conceptualization and measures of QCL model are also diagnostically and administratively useful. College administrators can use the QCL measures and to survey their student populations. The survey findings should assist college administrators in identifying problems and areas of strengths. Problems are signaled by dissatisfaction ratings related to the college facilities and services as well as the academic and social aspects of the college.

Furthermore, college administrators can use the QCL measures to monitor the level of QCL of their student population. Doing so amounts to monitoring the social health of their institutions. The overall academic and social health of a given institution has implications for the greater community as well. Consequently, the value in these results does not stop at the gates of the institutions themselves. There are also much broader implications for public policy officials who are seeking to provide quality educational experiences and environments for all members of the greater community and society. Symonds (2004) has noted that there is an increasingly wide "chasm" between the "haves" and the "have nots" in education. He argues that this "exacerbates the inequality gap" citing the wide disparity in giving between places at the top like Harvard (\$556 million in 2003) and places at the bottom like Palm Beach Community College (\$800,000 in 2003). Both these schools have approximately 20,000 students. If public policy officials have access to a monitoring program of the CQL of universities and colleges across the nation, decisions can be made to target needed areas of correction and support. The measuring and monitoring of the entire public higher education system can aid in the better allocation of precious resources to enhance the potential for attracting, keeping, and supporting, minority and at-risk populations.

Although minority college enrollment has registered a 122% over the past two decades in the U.S. (Reynolds, 2004), these populations are ones that have traditionally failed to pursue the avenues of higher education that, even if made available to them, fail to be attractive choices. An ability to adjust

programs and environments in order to increase that attractiveness will, in turn, benefit society as a whole by providing a well-trained and engaged segment of the population who otherwise may fall by the wayside.

## NOTE

<sup>1</sup> Note that not all possible basic services or facilities that a university may offer were included in the satisfaction composite score. This is because these basic services and facilities varied across all three universities.

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