Is Business School Performance Impacted by Market Orientation Toward Students, Employers of Students, and Parents of Students? Views from Accounting Department Chairpersons, Business School Deans, and Academic Vice-Presidents of AACSB Business Schools

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This paper is part of a continuing research stream dealing with organizational behavior and performance in higher education, specifically within AACSB-International business schools. Using responses to a national survey sent to AACSB-International members schools located in the United States, we report market orientation levels toward students, parents of students, and employers of students as well as levels of organizational performance reported by accounting department chairpersons, business school deans, and academic vice-presidents. Theory and empirical research suggest that higher levels of market orientation result in higher levels of organizational performance. Comparisons of the various input scores for each customer group (students, parents of students, and employers of students) submitted by the survey respondents are made against a benchmark established for businesses in the marketing literature and then scores are compared by administrative groups against one another. Finally, regression analysis is used to determine if the reported levels of organizational performance are impacted by the levels of reported market orientation. Altogether, 101 accounting department chairpersons, 130 business school deans, and 110 academic vice-presidents responded. The paper presents details of the research process, findings, statistical inferences, and discusses the implications of the research for schools of business and academic accounting departments.

Keywords: market orientation in education, AACSB business schools, business school management

Introduction

AACSB business schools seek to attain and maintain high levels of performance as measured by the AACSB accreditation standards. Additionally, future high performance is sought by employing the concept of continuous improvement. Numerous mission strategies may be used by various business schools to assure they maintain accreditation. This research attempts to ascertain if a particular strategy, employed by many
businesses, may lead to improved organization performance within AACSB business schools. The strategy studied is called market orientation. We describe and then measure quantitatively the level of market orientation within AACSB business schools. We then compare measurements between businesses and business schools. Finally, we compare levels of reported market orientation from different levels of administrators (managers) within AACSB schools of business. The research attempts to provide insight into how performance of AACSB-International member business schools may be affected by a market orientation strategy.

AACSB-International standards for business school accreditation outline requirements that if met lead to accreditation thereby elevating the status of the school as well as indicating superior performance. Additionally, the Baldrige National Quality Program (BNQP, 2005) has established the Baldrige Education Criteria for Performance Excellence for universities and other educational organizations, and includes “student, parent, and employer stakeholder, and market focus category” among the criteria leading to performance excellence. This particular category of criteria suggests that organizations identify potential market segments and determine which ones to pursue, then take steps to learn “key requirements and changing expectations”, build relationships, increase loyalty, and determine satisfaction/dissatisfaction of those stakeholder markets.

Market selection and other applications of marketing theory by practitioners within higher education are appropriate and should certainly be beneficial. The idea that organizations of higher education should employ marketing strategies to improve their performance appeared in the literature as early as the 1960s. Kotler and Levy (1969) were pioneers in successfully arguing for broadening the scope of marketing (and the marketing concept) to include higher education as well as other nonbusiness organizations.

This paper reports the results of an empirical study within AACSB member schools examining the levels of self-reported market orientation toward students, parents of students, and employers of students. Market orientation scores are used as the independent variables in this study. The research investigates the impact of the independent variables on reported organizational performance, the dependent variable in the study.

**Discussion and Literature Review**

In business schools, excellence is assessed and assured by the qualification standards of the bodies awarding formal accreditation to business schools (D. Karathanos & P. Karathanos, 1996). For American business schools, the main accreditation body is AACSB-International (the Association to Advance Collegiate Schools of Business). Performance is ranked more informally by the annual guide published by *U.S. News and World Report* and by the Peterson’s web-based educational information resource.

The BNQP (2005), mentioned above, incorporates behaviors and actions indicative of high levels of market orientation are described at length in the marketing literature (see Kohli & Jaworski, 1990; Narver & Slater, 1990; Jaworski & Kohli, 1993; Slater & Narver, 1994). Further, the marketing literature (Barksdale & Darden, 1971; Houston, 1986; Kohli & Jaworski, 1990; Narver & Slater, 1990; Jaworski & Kohli, 1993; Siguaw, Brown, & Widing, 1994) supports assertions by practitioner-oriented publications such as the BNQP (2005) that these behaviors and actions result in a greater ability of the organization to achieve its objectives and attain higher levels of performance.
The term *market orientation* refers to the extent that an organization uses the marketing concept. Kohli and Jaworski (1990) described the processes required to engender a market orientation as a “distinct form of sustainable competitive advantage” (p. 17). They stated that market orientation consists of “the organizationwide generation, dissemination, and responsiveness to market intelligence” (p. 3). Narver and Slater (1990) agreed with Kohli and Jaworski (1990) and proposed three behavioral components (customer orientation, competitor orientation, and interfunctional coordination) that “comprehend the activities of marketing information acquisition and dissemination and the coordinated creation of customer value” (pp. 21-22).

Webster, Hammond, and Harmon (2005), Hammond, Webster, and Harmon (2006), Hemsley-Brown and Oplatka (2010), Zakaria, Roslin, and Daud (2011), Webster, Hammond, and Rothwell (2013), and Hammond and Webster (2014) have brought the study of market orientation into the area of higher education over the past decade. Collective works have begun to demonstrate that market orientation strategies/cultures may be linked to higher levels of performance within organizations of higher education.

In this study, we investigate organizational behaviors described in the market orientation literature, AACSB standards for accreditation, and the BNQP (2005) as applied toward students, parents of students, and employers of students by accounting department chairpersons, business school deans, and academic vice presidents of AACSB member schools.

### Research Questions

The objectives of this study were to answer the following research questions:

1. What are the mean levels of market orientation toward students, parents of students, and employers of students as reported by accounting department chairpersons, business school deans, and academic vice-presidents of business schools belonging to AACSB?

2. How do the mean levels of market orientation of the accounting department chairpersons, business school deans, and academic vice-presidents toward students, parents of students, and employers of students compare to the levels of market orientation toward customers reported by specialty business managers as catalogued in previous research conducted on businesses in the private sector?

3. Do the mean levels of market orientation toward students, parents of students, and employers of students differ between the accounting department chairpersons, business school deans, and academic vice-presidents?

4. What are the mean scores of the organizational performance scale reported by the accounting department chairpersons, business school deans, and academic vice-presidents? And, do these reported levels differ between the three groups of administrators?

5. Do levels of reported market orientation toward students, parents of students, and employers of students impact the level of reported organizational performance as reported by accounting department chairpersons, business school deans, and the academic vice-presidents?

To answer research question 1, the market orientation mean scores for each of the three groups were calculated for the three dimensions of market orientation (customer orientation, competitor orientation, and internal coordination), and the overall market orientation score which is the numerical average of the three dimension scores.

To answer research question 2, the market orientation mean scores of the administrators were compared to the mean scores of specialty business managers as reported by Narver and Slater (1990). For each comparison, *t*-tests were conducted separately on the four components of market orientation.
To answer research question 3, the mean scores of the three groups of administrators were compared for differences using a set of $t$-tests for each of the dimensions of market orientation.

To answer research question 4, the mean scores for the organizational performance scale were computed and a $t$-test was used to check for significant differences between the inputs from the three administrator groups.

To address research question 5, regression models were constructed to determine if the independent variable, that being the overall market orientation score of each group had a significant statistical effect on the dependent variable, organizational performance.

**Methodology**

Data for the study were collected by way of a mailed survey. Survey instruments along with a cover letter were mailed to academic vice-presidents, deans, and accounting department chairpersons of schools of business located in the United States holding membership in AACSB-International. As key informants (Campbell, 1995; Phillips, 1981), the vice-presidents, deans, and accounting chairpersons were asked to complete the surveys and return them in business reply envelopes that were provided. Of the total survey instruments mailed, 110 were completed and returned by the academic vice-presidents, 130 were completed and returned by the business school deans, and 101 were completed and returned by the accounting department chairpersons. The overall response rate was approximately 22%.

To measure market orientation, we chose Narver and Slater’s (1990) construct (MKTOR), which consists of several questions addressing specific behaviors and activities which, together, measure the extent that the organization (the school of business in this case) applies the marketing concept. The scale addresses concerns raised by Barksdale and Darden (1971) that market orientation is properly measured in terms of behaviors and activities instead of “philosophical notions”. A 7-point response scale is used ranging from 1 = “not at all” to 7 = “to an extreme extent”. Scores above the midpoint (4.0) indicate application by the respondent of the marketing concept; scores below the midpoint indicate a lack of application by the respondent. Questions from the original scale were modified somewhat to conform to the vocabulary prevalent in academic institutions. We combine the questions to form three subscales that measure the market orientation components (customer orientation, competitor orientation, and interfunctional coordination), matching Narver and Slater’s methodology. The subscales combine to form an overall measure of market orientation, also matching Narver and Slater’s methodology. The questions (45 in all) and explanatory information about the survey questions may be found in Appendix 1.

“Overall performance” was measured using the Jaworski and Kohli (1993) two-item measure that is based on executive opinion of performance. No specific performance goals are assumed for the respondents. Each respondent is requested to answer the two questions about actual recent overall performance relative to the expectations and performance goals of their organization, in this case the school of business. Possible responses on the 7-point scale range from poor (1) to excellent (7). The questions and explanatory information about the survey questions may be found in Appendix 2. Slater and Narver (1994, p. 51) defend the use of subjective performance measures, noting that the measures “are used commonly in research on private companies or business units of large corporations” as well as the “strong correlation between subjective assessments and their objective counterparts” indicated in previous research.
The market orientation scales were subjected to reliability analysis, exploratory factor analysis and confirmatory factor analysis (Wheaton, Muthen, Alwin, & Summers, 1997; Bentler & Bonett, 1980; Marsh & Hocevar, 1985; Bentler, 1990; Browne & Mels, 1992; Browne & Cudeck, 1993). Results of these analyses indicated satisfactory reliabilities (ranges from 0.74 to 0.87), satisfactory item-to-total correlations (ranges from 0.49 to 0.77), exploratory factor loadings ranging from 0.33 to 0.89, and confirmatory factor loading ranging from 0.36 to 0.82. Additionally, the confirmatory factor analysis demonstrated generally acceptable fit. These test results included comparative fit index measures ranging from 0.784 to 1.000, a Tucker-Lewis index ranging from 0.702 to 1.000, and the CMIN/DF ranging from 2.05 to 2.56. The RMSEA low values at the 90% confidence interval fell below 0.10 for all scales.

The Pearson correlation coefficient for the two overall performance items was found to be 0.757 (significance 0.000) indicating reliability for the scale.

The possibility of nonresponse bias was tested by comparing early and late respondents (Armstrong & Overton, 1977). The tests indicated no significant differences between early and late respondents (at the 0.10 level of significance). Also, Berdie (1989) found that, even in the event of nonresponse bias in mail surveys, typically the bias did not alter the survey findings. We proceeded on the basis that significant nonresponse bias did not exist.

Narver and Slater (1990) reported market orientation scores for three separate types of businesses: commodity, specialty, and distribution. We believe schools of business demonstrate more of the characteristics of specialty businesses than the characteristics of the commodity or distribution businesses. The specialty business firms produced and sold products that were individualized (relative to the commodity products) for specific customer orders. Likewise AACSB schools of business seek to provide a product that is individualized through its programs of study or majors. AACSB schools would argue that a superior product (relative to non-member schools) is provided that would benefit its customers or stakeholders. We therefore used the market orientation scores for specialty business as reported by Narver and Slater (1990) for our comparisons.

Results

Table 1 shows that market orientation scores toward students for the three academic administrator groups were all lower than the specialty business managers at either the 0.01 or 0.05 levels in 11 of the 12 t-tests. These comparisons were accomplished to establish baselines for academic administrators verses mean scores that have been previously reported in the literature for businesses.

The mean scores for the VPs are higher for each construct than both the deans and the accounting chairpersons. The mean scores for the deans are higher than for the accounting chairpersons. When considering the overall market orientation scores for the three groups, there are significant statistical differences at the 0.05 level between the VPs and the deans and accounting chairs. Additionally, the academic VPs and deans were the only groups that had an overall market orientation mean score over 4.0, which represents the mid-point of the 7-point scale. The mean scores reported indicate that the market orientation toward students is higher as the administrator position becomes higher in the organizational structure.
Table 1
Descriptive Statistics for Market Orientation Toward Students as a Customer Group: Mean Scores for Market Orientation Constructs (4) and T-tests for Specialty Business Managers vs. Academic VPs, Business School Deans and Accounting Chairs of AACSB Schools Based on a 7-Point Scale

| Construct | Specialty business managers | Academic VPs | Business school deans | Accounting department chairs |
|-----------|-----------------------------|--------------|-----------------------|-----------------------------|
| MO—Customer | 5.05 | 4.77 * | 4.55 * | 4.44 * |
| MO—Competition | 4.71 | 4.17 | 3.71 * | 3.38 |
| MO—Coordination | 4.53 | 4.44 * | 4.13 * | 3.70 |
| MO—Overall | 4.77 | 4.46 ** | 4.13 * | 3.84 |

Notes: *: Significant at 0.01 verses specialty business managers. **: Significant at 0.05 verses specialty business managers. ^: Not significant compared to specialty business managers. VPs higher at < 0.05 than deans and accounting chairs for MO-Overall. Deans vs. accounting chairs not significant at 0.05 for MO-Overall.

Table 2 shows that market orientation scores toward employers of students for the three academic administrator groups were all lower than the specialty business managers at either the 0.01 or 0.05 levels in all of the 12 t-tests.

The mean scores for the VPs are higher for each construct than both the deans and the accounting chairpersons. The mean scores for the deans are higher than for the accounting chairpersons. When considering the overall market orientation scores for the three groups, there are significant statistical differences at the 0.01 level between the VPs and the deans and accounting chairs. Additionally, the academic VPs were the only group that had an overall market orientation mean score over 4.0, which represents the mid-point of the 7-point scale. The mean scores reported indicate that the market orientation toward employers of students is higher as the administrator position becomes higher in the organizational structure.

Table 2
Descriptive Statistics for Market Orientation Toward Employers of Students as a Customer Group: Mean Scores for Market Orientation Constructs (4) and T-tests for Specialty Business Managers vs. Academic VPs, Business School Deans and Accounting Chairs of AACSB Schools Based on a 7-Point Scale

| Construct | Specialty business managers | Academic VPs | Business school deans | Accounting department chairs |
|-----------|-----------------------------|--------------|-----------------------|-----------------------------|
| MO—Customer | 5.05 | 4.51 * | 4.06 * | 3.94 |
| MO—Competition | 4.71 | 4.11 * | 3.69 * | 3.36 |
| MO—Coordination | 4.53 | 4.22 ** | 3.91 * | 3.57 |
| MO—Overall | 4.77 | 4.28 * | 3.89 * | 3.62 |

Notes: *: Significant at 0.01 verses specialty business managers. **: Significant at 0.05 verses specialty business managers. VPs higher at 0.01 than deans and accounting chairs for MO-Overall. Deans vs. accounting chairs not significant at 0.05 for MO-Overall.

Table 3 shows that market orientation scores toward parents of students for the three academic administrator groups were all lower than the specialty business managers at 0.01 level in all of the 12 t-tests.
The mean scores for the VPs are higher for each construct than both the deans and the accounting chairpersons. The mean scores for the deans are higher than for the accounting chairpersons. When considering the overall market orientation scores for the three groups, there are significant statistical differences at the 0.01 level between the VPs and the deans and accounting chairs. Once again, the mean scores reported indicate that the market orientation toward parents of students is higher as the administrator position becomes higher in the organizational structure.

Table 3
Descriptive Statistics for Market Orientation Toward Parents of Students as a Customer Group: Mean Scores for Market Orientation Constructs (4) and T-Tests for Specialty Business Managers vs. Academic VPs, Business School Deans and Accounting Chairs of AACSB Schools Based on a 7-Point Scale

| Construct        | Specialty business managers | Academic VPs | Business school deans | Accounting department chairs |
|------------------|-----------------------------|--------------|-----------------------|-----------------------------|
| MO—Customer      | 5.05                        | 2.80*        | 2.59*                 | 2.47*                       |
| MO—Competition   | 4.71                        | 3.87*        | 3.41*                 | 3.08*                       |
| MO—Coordination  | 4.53                        | 3.81*        | 3.55*                 | 2.97*                       |
| MO—Overall       | 4.77                        | 3.49*        | 3.18*                 | 2.84*                       |

Notes: * Significant at 0.01 verses specialty business managers. VPs higher than accounting chairs at 0.01 for MO-Overall. VPs vs. deans not significant at 0.05. Deans vs. accounting chairs significant at 0.05.

Table 4
Descriptive Statistics: Mean Scores for Business School Performance Indicator for AACSB VPs, Deans, and Accounting Chairs Based on a 7-Point Scale

| Description | Academic VPs | Deans | Accounting chairs |
|-------------|--------------|-------|-------------------|
| Mean        | n = 110      | n = 130 | n = 101          |
| Performance | 5.295        | 5.345  | 5.282             |

No significant statistical differences in mean scores were found between the three groups in the performance variable (see Table 4). This would seem to indicate that at all three levels of administration, performance of the business school was viewed as similar. However, how each group arrived at their conclusions concerning organizational performance may well be affected by differing measurement criteria. Next, we constructed series regression models as follows to see if and to what extent market orientation toward students, parents of students, and employers of students impacted reported levels of business school performance:

\[ Y = a + h_{i}x_{i} \]

where:

\( Y \) = Mean score of the two-item performance scale as reported by VPs, deans, and accounting department chairpersons;
\( a \) = Intercept;
\( x_{i} \) = Mean score of the overall market orientation construct as reported by the VPs, deans, and accounting department chairpersons individually for students, employers of students, and parents of students, nine regressions overall.
Tables 5-7 that follow present the results of the regression equations and yield that all the regression models are statistically significant in that all show that organizational performance is positively affected by market orientation scores. The analyses of the regression models that follow provide insight and answers to research question 5.

**Table 5**
*Regression Results: Overall Market Orientation Score Effect on Performance Reported by AACSB Academic VPs for Three Groups (Students/Employers of Students/Parents of Students)*

| Model (Overall MO) | Academic VPs \((n = 110)\) |
|--------------------|-------------------------------|
| \(F\)            | Significance                  |
| 45.56/9.326/6.98  | 0.000/0.000/0.005            |

* \(R^2 = 0.315/0.217/0.139 \) (Adjusted \(R^2 = 0.289/0.194/0.115\))

**Table 6**
*Regression Results: Overall Market Orientation Score Effect on Performance Reported by AACSB Business School Deans for Three Groups (Students/Employers of Students/Parents of Students)*

| Model (Overall MO) | Deans \((n = 130)\) |
|--------------------|----------------------|
| \(F\)            | Significance         |
| 42.85/9.02/5.73   | 0.000/0.000/0.032    |

* \(R^2 = 0.244/0.177/0.103 \) (Adjusted \(R^2 = 0.238/0.158/0.081\))

**Table 7**
*Regression Results: Overall Market Orientation Score Effect on Performance Reported by AACSB Accounting Department Chairs for Three Groups (Students/Employers of Students/Parents of Students)*

| Model (Overall MO) | Accounting department chairs \((n = 101)\) |
|--------------------|---------------------------------------------|
| \(F\)            | Significance                  |
| 28.85/5.56/4.52   | 0.000/0.048/0.050             |

* \(R^2 = 0.226/0.153/0.101 \) (Adjusted \(R^2 = 0.218/0.139/0.079\))

**Conclusion**

This research finds that market orientation toward students, parents of students, and employers of students does indeed impact organizational performance as reported by the vice-presidents for academics, business school deans, and accounting department chairpersons of AACSB business schools. Higher levels of market orientation toward these three stakeholder groups are significant in explaining changes in levels of reported performance.

**Implications**

These findings demonstrate that businesses perceive a greater importance and have made greater progress in the implementation of the marketing concept vis-à-vis university schools of business as perceived by their academic vice-presidents, business school deans and accounting department chairpersons.

As the academic vice-presidents, deans and the accounting department chairs reported lower levels of market orientation in their organization than did their business counterparts, a significant opportunity would seem to exist for schools that will put more effort into their market orientation. As students of the university may be viewed as the most visible of the numerous markets served, market orientation efforts focused at students would seem to have the potential for the fastest and highest payoff.
Examples of such payoffs might include:

1. An increase in enrollment within the business school;
2. An increase in the number of business/accounting majors;
3. An increase in the retention rate of current business/accounting students;
4. An increase in graduation rates in the business.

Payoffs expected if more efforts were put into market orientation toward employers of students might include:

1. An increase in the number of employers hiring business/accounting graduates;
2. An increase in total business/accounting students placed in jobs upon graduation;
3. An increase in the number of internship programs available to business/accounting graduates;
4. Enhancement of the academic programs via input from employers.

The enhancement of market orientation toward the parent group could also pay dividends to the university. Additional parental involvement with the university might lead to the following:

1. Increased participation in the educational process with their students;
2. A building of goodwill that might benefit the school in future recruiting and retention efforts;
3. Willingness of parents to give more freely to the programs of the school;
4. Increased feedback from another stakeholder group of the school;
5. Enhanced parental impact on the purchase decision when a student selects a college.

In view of Narver and Slater (1990) and Kohli and Jaworski (1990) findings that enhanced levels of market orientation will improve the competitive advantage of organizations, business schools appear to be organizations ripe to take advantage of the market orientation concept. Focus on creating market orientation culture should serve both schools and their various stakeholders in more effectively achieving the school mission.

Our conclusions are tempered by the findings of Noble, Sinha, and Kumar (2002) and Haugland, Myrtveit, and Nygaard (2007) that there appears to be no single strategic orientation that leads to superior performance in every case; and building a market orientation culture within an organization is not a quick fix but rather a continuous process. Also, the results of this study are limited by the fact that only AACSB business schools in the United States were studied.

**Future Research**

The research we report suggests several needs for further investigation. For example, research should be undertaken to examine the impact or influence that variables such as size of a school, school affiliation (AACSB, ACBSP, or neither), admission standards, placement efforts, or recruiting efforts have on customer and market orientation. Such research would further our understanding of the market orientation construct and its application to higher education.

Additional research in organizational culture including that of market orientation should be conducted in other non-profit organizations. Of particular interest would be an expansion of this line of research into other areas of higher education, into governmental agencies that provide services to the public, and into the non-profit side of the healthcare industry.
References

AACSB International. (2010). Business school data trends and 2010 list of accredited schools. AACSB-International Publications, Tampa, FL., pp. 47-57.

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. Journal of Marketing Research, 14(3), 396-402.

Barksdale, H. C., & Darden, B. (1971). Marketers’ attitudes toward the marketing concept. Journal of Marketing, 35(4), 29-36.

Bentler, P. M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107(2), 238-246.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. Psychological Bulletin, 88(3), 588-606.

Berdie, D. (1989). Reassessing the value of high response rates to mail surveys. Marketing Research, 1(3), 52-64.

BNQP. (2005). Baldrige education criteria for performance excellence. Baldrige National Quality Program, Retrieved from http://www.quality.nist.gov/Education_Criteria.htm

Browne, M. W., & Cudeck, R. (1993). Alternate ways of assessing model fit. In K. A. Bollen, & K. S. Long (Eds.), Testing structural equation models (pp. 136-162). Newbury Park, California: Sage Publications.

Browne, M. W., & Mels, G. (1992). ROMONA user’s guide. Columbus, OH: Ohio State University Press.

Campbell, D. T. (1955). The informant in quantitative research. American Journal of Sociology, 60(4), 339-342.

Hammond, K. L., & Webster, R. L. (2014). Marketing department chairs as key informants—The role of gender in judging the consequences of student market orientation within AACSB member schools. Academy of Educational Leadership Journal, 18(4), 187-194.

Hammond, K. L., Webster, R. L., & Harmon, H. A. (2006). Market orientation, top management emphasis, and performance within university schools of business: Implications for universities. Journal of Marketing Theory and Practice, 14(1), 69-85.

Haugland, S. A., Myrtveit, I., & Nygaard, A. (2007). Market orientation and performance in the service industry: A data envelopment analysis. Journal of Business Research, 60(11), 1191-1197.

Hemsley-Brown, J., & Oplatka, I. (2010). Market orientation in universities: A comparative study of two national higher education systems. International Journal of Educational Management, 24(3), 201-220.

Houston, F. S. (1986). The marketing concept: What it is and what it is not. Journal of Marketing, 50(2), 81-87.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. Journal of Marketing, 57(3), 53-70.

Karathanos, D., & Karathanos, P. (1996). The Baldrige education pilot criteria 1995: An integrated approach to continuous improvement in education. Journal of Education for Business, 71(5), 272-276.

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. Journal of Marketing, 54(2), 1-18.

Kotler, P., & Levy, S. J. (1969). Broadening the concept of marketing. Journal of Marketing, 33(1), 10-15.

Marsh, H. W., & Hocevar, D. (1985). Applications of confirmatory factor analysis to the study of self-concept: First- and higher-order factor models and their invariance across groups. Psychological Bulletin, 97(3), 562-582.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. Journal of Marketing, 54(4), 20-35.

Noble, C. H., Sinha, R. K., & Kumar, A. (2002). Market orientation and alternative strategic orientations: A longitudinal assessment of performance implications. Journal of Marketing, 66(4), 25-39.

Peterson’s Guide to Four Year Colleges, 2001, 31st ed. (2000) Lawrenceville, NJ: Peterson’s/Thomson Learning.

Phillips, L. W. (1981). Assessing measurement error in key informant reports: A methodological note on organizational analysis in marketing. Journal of Marketing Research, 18(4), 395-415.

Siguaw, J. A., Brown, G., & Widing, R. E. II. (1994). The influence of the market orientation of the firm on sales force behavior and attitudes. Journal of Marketing Research, 31(1), 106-116.

Slater, S. F., & Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? Journal of Marketing, 58(1), 46-55.

Webster, R. L., Hammond, K. L., & Harmon, H. A. (2005). Comparing market orientation culture of businesses and schools of business: An extension and refinement. Psychological Reports, 96, 377-382.

Webster, R. L., Hammond, K. L., & Rothwell, J. C. (2013). Accounting department chairpersons’ perceptions of business school performance using a market orientation model. Journal of Business of International Education Research, 9(1), 55-64.

Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. In D. R. Heise (Ed.), Sociological methodology 1977 (pp. 84-136). San Francisco: Jossey-Bass.

Zakaria, Z., Roslin, R. M., & Daud, N. M. (2011). The influence of market orientation on the commitment, trust and relational norms in the education context. African Journal of Business Management, 5(22), 8875-8890.
Appendix 1

Fifteen of 45 survey questions sent to accounting department chairpersons, business school deans, and academic vice-presidents of AACSB Schools of Business Administration:

1. Our objectives are driven by satisfaction of our students;
2. We measure satisfaction of our students systematically and frequently;
3. Those responsible for recruiting students regularly share information within our business school/institution concerning competitor’s strategies;
4. Our market strategies (such as recruiting and retention) are driven by our understanding of the possibilities for creating value for our students;
5. We respond rapidly to competitive actions that threaten us;
6. We constantly monitor our level of commitment and orientation to students;
7. University administration regularly discusses competitors’ strengths and strategies;
8. All levels of administration understand how the entire institution can contribute to creating value for students;
9. We give close attention to service of students after enrollment;
10. Our strategy for competitive advantage is based on our understanding of our students’ needs;
11. We encourage other staff and faculty outside of recruiting/administration to meet with our prospective students;
12. All of our departments are responsive to and integrated in serving students;
13. Information on recruiting successes and failures are communicated across functions in the business school/institution;
14. We share information and coordinate resource use with other units in the institution;
15. We target potential students where we have, or can develop a competitive advantage.

Each question was answered on a 7-point scale: 1 = Not at all, 7 = To an extreme extent. Questions 1, 2, 4, 6, 9, and 10 relate to the Customer Orientation construct/dimension, Questions 3, 5, 7, 11, and 15 relate to the Competitor Orientation, and Questions 8, 12, 13, and 14 relate to Organizational Coordination. The Overall Marketing Orientation score is computed by averaging the mean scores of the other three sets of questions.

The other 30 survey questions noted in the paper were as above except the word “students” was replaced by the phrases, “employers of students” and “parents of students”.

Appendix 2

Performance measurement questions sent to accounting department chairperson, business school deans, and vice-presidents of AACSB Schools of Business Administration:

1. Overall performance of the school of business last year was;
2. Overall performance of your business school relative to major competitors last year was.

Both questions were answered on a 7-point scale: 1 = Poor, 7 = Excellent.