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**No Ethics Please,
We're MBAs:
An Alumni Assessment**

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No Ethics Please, We're MBAs: An Alumni Assessment

Chris Lockwood and Joe Anderson

Over the last two years we have faced a series of disturbing revelations of corporate misconduct in numerous organizations (e.g., Adelphia, AOL Time Warner, Arthur Andersen, Cendant, Christie's, Citigroup, Enron, Global Crossing, ImClone, Merrill Lynch, Qwest, Rite Aid, SEC, Sotheby's Tyco, WorldCom and Xerox). Critics assert that a good portion of the blame for causing these scandals should be assigned to business educators (Verschoor, 2003) and demand that business schools strengthen the ethics components of their programs (Hindo, 2002; Merritt, 2003). Adler (2002) and members of the Critical Management Studies Interest Group of the Academy of Management issued an urgent call for academics to engage in serious dialogue on the underlying reasons for recent corporate scandals. Of relevance to the current discussion is their recommendation to restore and strengthen required ethics courses.

In the interest of contributing to this dialog by examining the importance of ethics to the assessment of an MBA program, this study re-examines a data set from 1994 to determine the importance alumni placed on ethics and social responsibility in their overall assessment of their MBA program. Other predictors in this study include measures of quantitative and qualitative dimensions of an MBA curriculum.

METHOD

Data for this study was originally collected as part of a larger project assessing the experiences and interests of alumni from a large university located in the United States. One hundred-fifty-nine MBA alumni provided responses for the current study. These alumni, on the average, graduated six years prior to the survey and completed their MBA in 19 months. Seventy-seven percent indicated they had worked at least part-time during their MBA program.

Instruments

Criterion variable. MBA Program Effectiveness was assessed with a scale developed from six items contained in the larger study. These items are presented in Table 1. Alumni were asked to indicate the extent to which they agreed with each item. A 5-point scale ranging from (1) *strongly disagree* through (3) *neutral* to (5) *strongly agree* was used to anchor responses. Coefficient alpha was .82.

Table 1
MBA Program Effectiveness Items

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1. My graduate experience met my expectations of what a good business school should be.
 2. My MBA was worth its total cost in time, tuition, living expenses, and lost earnings.
 3. I would hire someone with an MBA from my alma mater over a similarly qualified individual with an MBA from another school.
 4. MY MBA program provided practical information that I use on the job.
 5. I believe the business school prepared me well for a successful career in business.
 6. If I could "do it all again," I would still go to my alma mater for my MBA.
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Note. Items 3 and 6 originally contained the name of the university instead of the words my alma mater.

Predictor Variables. The first step in this study consisted of developing a pool of items tapping multiple aspects of an MBA Program. Items were developed by asking faculty in the university's college of business to list the skill, knowledge, or perspective areas an MBA might be expected to possess. The final item pool contained 24 items and was seen as generally exhaustive when reviewed by members of the college's graduate curriculum committee. Alumni were first asked to indicate how important each item was in today's work place. A 5-point scale ranging from (1) *not at all important* through (3) *somewhat important* to (5) *extremely important* anchored their responses. Then, alumni were asked to indicate how effective their MBA Program was in addressing each item. This second set of responses to the 24 items ranged from (1) *not at all effective* through (3) *somewhat effective* to (5) *extremely effective*.

Analysis

The importance responses to the 24-item set were subjected to a principal axes factor analysis (with multiple R^2 as communality estimates and a varimax rotation). This was done because the importance responses were correlated (i.e., multicollinearity appeared to be a problem). Items were considered to define a factor if their factor loading was greater than .4 without crossloadings above .3. The initial analysis revealed eleven items did not meet the criterion. These items were excluded and the analysis rerun. The second factor analysis is discussed in the results section below. Scale scores used in the subsequent regression analysis were computed based on alumni responses to how effectively their MBA Program addressed each item. Thus, the scale scores were determined using different responses from those used to identify the factors.

Forward multiple regression was employed to determine significant predictors of MBA Program Effectiveness. A predictor added at a step was significant when the addition of the variable produced a significant increase in explained criterion variance (i.e., a statistically significant increase in R^2 , see Kerlinger & Pedhazur, 1973). Predictors included in the analysis consisted of three factor analytically derived scales.

RESULTS

Using the eigenvalue test (Harmon, 1967), the factor structure that best represented the data was that of a three-factor orthogonal rotation. Results are shown in Table 2. The first factor was defined by communications, problem solving and decision making, presentation skills, analytical, quantitative skills in computers and creativity. This factor explained 38.8% of the common variance. Subsequent analysis of the importance responses revealed the internal consistency of the scale based on this factor could be improved (from coefficient $\alpha = .86$ to $.87$) by omitting item 4. Therefore, the final scale consisted of four items and was interpreted to be a measure of Qualitative Skills. The second factor explained 7.4% of the common variance and obtained high loadings on the remaining analytical, quantitative skill items labeled 6 through 10 in Table 2. This factor was defined as Quantitative Skills (coefficient $\alpha = .79$). The third factor was defined by measures of social responsibility, ethical judgment and cultural sensitivity and explained 6.4% of the common variance. This factor was interpreted as a measure of Citizenship. Subsequent analysis of the importance responses revealed the internal consistency of the scale based on this factor could be improved (from coefficient $\alpha = .86$ to $.87$) by omitting item 13. Thus the final Citizenship scale consisted of two items. Together the three factors explained 52.6% of the total variance.

Table 2
Factor Loadings for Item Pool

Item	Factor 1	Factor 2	Factor 3
1. Communications skills (both oral and written)	.89	.14	.09
2. Problem solving and decision making	.78	.24	.13
3. Presentation skills (both oral and written)	.67	.11	.21
4. Analytical, quantitative skills in Computers	.57	.14	.33
5. Creativity	.43	.10	.33
6. Analytical, quantitative skills in Statistics	.10	.66	.19
7. Analytical, quantitative skills in Managerial Economics	.03	.65	.23
8. Analytical, quantitative skills in Finance	.31	.65	.03
9. Analytical, quantitative skills in Production and Operations Management	.02	.59	.00
10. Analytical, quantitative skills in Accounting	.34	.57	.04
11. Social responsibility	.13	.13	.84
12. Ethical judgment	.27	.18	.76
13. Cultural sensitivity	.24	.15	.62
Eigenvalue	7.37	1.40	1.22
Percentage of common variance	38.8	7.4	6.4
Coefficient Alpha	.86	.79	.86

Note. Boldface values are greater than .40. Factor analysis results and coefficient alphas are based on alumni responses to how important each item was in today's work place ranging from (1) *not at all important* through (3) *somewhat important* to (5) *extremely important*.

Scale scores were then calculated based on alumni effectiveness responses and used as independent variables in the subsequent regression analysis. Table 3 presents these scales together with their respective item means and standard deviations. Coefficient alphas for the Qualitative Skills, Quantitative Skills and Citizenship scales based on the alumni's effectiveness responses were .69, .59, and .86 respectively.

Table 3
Predictor Scales, Item Means and Standard Deviations

Item	M	SD
<u>Qualitative Skills</u> (coefficient alpha = .69)		
1. Communications skills (both oral and written)	3.49	.96
2. Problem solving and decision making	3.60	.95
3. Presentation skills (both oral and written)	3.59	.96
5. Creativity	3.05	.97
<u>Quantitative Skills</u> (coefficient alpha = .59)		
6. Analytical, quantitative skills in Statistics	3.51	.85
7. Analytical, quantitative skills in Managerial Economics	3.21	.83
8. Analytical, quantitative skills in Finance	3.60	.73
9. Analytical, quantitative skills in Production and Operations Management	3.00	1.07
10. Analytical, quantitative skills in Accounting	3.66	.87
<u>Citizenship</u> (coefficient alpha = .86)		
11. Social responsibility	3.08	.97
12. Ethical judgment	3.06	1.07

Note. Item numbers correspond to those used in Table 2. Coefficient alphas, item means and standard deviations based on alumni responses to how effectively their MBA program addressed each item. Responses ranged from (1) *not at all effective* through (3) *somewhat effective* to (5) *extremely effective*.

Table 4 shows means, standard deviations and correlations among the variables used in the stepwise multiple regression. All six intercorrelations among variables were significant ($p < .05$). This suggests that multicollinearity may still represent a potential problem for the stepwise regression procedure. An attempt was made to assess the extent of this possibility by calculating the average intercorrelation among predictors. After an r to z transformation the average intercorrelation was .35, indicating only 12% shared variance. It thus seems safe to conclude that multicollinearity is not a significant problem in the present study.

Table 4
Means, Standard Deviations, and Correlations Among Regression Variables

Variable	M	SD	Correlation with			
			1	2	3	4
1. MBA Program Effectiveness	3.82	.65	-----			
2. Qualitative Skills (Factor 1)	3.53	.69	.46**	-----		
3. Quantitative Skills (Factor 2)	3.41	.54	.44**	.45**	-----	
4. Citizenship (Factor 3)	3.08	.95	.25**	.19*	.29**	-----

* $p < .05$.

** $p < .01$.

Table 5 presents results of the stepwise multiple regression by listing, in order, variables that entered the equation, their contribution to explained variance, and incremental F ratios. As shown in Table 5, MBA Program Effectiveness was predicted ($R^2 = .28$, $p < .01$) by Qualitative Skills ($\Delta R^2 = .21$, $p < .01$) and Quantitative Skills ($\Delta R^2 = .07$, $p < .01$). Citizenship did not enter the equation since the probability of F to enter this variable was greater than the entry criterion of .05 required by the SPSS forward regression procedure. This variable also has the lowest mean score (see Table 4).

Table 5
Stepwise Multiple Regression of MBA Program Effectiveness with Predictor Variables

Dependent variable	Predictors entering equation (in order)	R^2	ΔR^2	F
	Quantitative Skills	.28	.07	29.43*

* $p < .01$.

Note. The probability of F to enter for Citizenship was greater than the entry criterion of .05 required by the SPSS forward regression procedure. Thus, Citizenship did not enter the equation.

LIMITATIONS

There are two methodological limitations of this study. First, the current study uses data from earlier work designed to focus on a single school's MBA alumni. Thus, our ability to generalize to MBA alumni from other schools is limited. Additionally, the age of the data may limit our ability to generalize to current MBA students at this school. Second, despite extensive measurement development efforts, a potential measurement problem exists. This study was the first application of the indicators used in the analysis. Initial internal consistency reliabilities for the three predictor scales based on importance responses were above the acceptable threshold for basic research (.70) suggested by Nunnally (1978), but the measures of Qualitative Skills and Quantitative Skills based on effectiveness responses obtained coefficient alphas (.69, .59, respectively) that approached but did not exceed this threshold. This suggests that future studies examine the test-retest reliability and construct validity of these indicators. Moreover, we recommend alternative measures of these constructs be developed.

CONCLUSIONS

The current results indicate alumni based their assessment of MBA Program Effectiveness primarily on how effectively their program dealt with qualitative skills. This finding is consistent with employers' calls for increased emphasis on creativity, decision making and communications skills. Improving MBA students' abilities in these areas is critical to gaining the support of this constituent group since student (and public) opinion have become increasingly important for the fate of business schools (Rynes & Trank, 1999).

Effectiveness with respect to quantitative skills was also a significant predictor of MBA Program Effectiveness but of secondary importance to qualitative skills. Thus, continued emphasis on analytical skills in statistics, managerial economics, finance, production and operations management as well as accounting is valued by MBA alumni.

Our analysis of data from MBA alumni suggests that while qualitative and quantitative dimensions of an MBA program definitely contribute to graduates' evaluation of the effectiveness of their MBA programs, the citizenship dimension does not. Apparently, alumni did not use their program's ethical judgment and social responsibility components to make their assessment of MBA Program Effectiveness. There are four alternative explanations for this. First, in the business environment of the 1990's, the ethical component was not as prominent as it is today in business education, This may suggest different ethical perceptions exist among different generations of business graduates. However, the current study can only make suggestions in this direction, as further research is called for to solidify this inchoate conclusion. Second, the ethical component was prominent but not salient to the students at the time they completed their MBA program. This may imply that faculty and student perceptions of the importance of these issues differed. If true, this suggests faculty need to heighten students' awareness of this important dimension. Third, alumni may believe social responsibility and ethical judgment are important in today's work place but better addressed outside the MBA curriculum. This begs the question "Where are these issues best addressed?" Fourth, MBA alumni may believe their program inadequately addressed these issues. This is particularly noteworthy since many programs have removed ethics as a core course in their curricula, largely because most students prefer classes that are more directly "relevant" to getting a job (Gioia, 2002; Hindo, 2002). This despite the fact that hard-to-define "soft" problems, such as business ethics, often arise, and management students must be equipped to address them (Haynes, 1991). According to a recent Business Week Online article, only nine percent of MBA respondents to the 2003 Global MBA Survey (conducted by the Graduate Management Admissions Council) said ethics was incorporated "extremely effectively" in their MBA class work.

Business schools must address this issue since MBA education is becoming a commodity in a buyer's market, and graduate business students can take their business elsewhere (Richards-Wilson, 2002). Further, hiring organizations can also recruit from other business schools whose graduates more closely match corporate needs on this important dimension.

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