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GRADUATE AND EMPLOYER PERCEPTIONS PERTAINING TO THE RELATIVE IMPORTANCE OF CORE COURSES, MANAGEMENT SKILLS AND TRAITS REQUIRED BY SOUTH AFRICAN MBA PROGRAMMES

Abstract

This paper presents the findings in respect of two research objectives, which form part of a larger research project on the status and nature of MBA programmes in South Africa. In a summary form, the relevant research objectives are:

- to compare and contrast the opinions of MBA graduates and employers (representing business practice) on the relative importance of:
 - core courses for running a business, and
 - management skills and traits required in the business environment.

To achieve the above, two independent empirical surveys were conducted, canvassing the perceptions and opinions of 633 MBA graduates and 245 employers.

The main findings emphasised the relative importance attached to core courses and management skills and traits by both MBA graduate and employer respondents, but also the substantial disparities between these two groups. A global test, Hotelling T^2 , was performed to compare the profile (overall opinions) of the MBA graduates with that of the employers. The results of these tests indicate that the employer group of respondents perceived both the core courses and the required management skills and traits as more important than the MBA graduate group of respondents.

The paper concludes with the implications of these findings.

1 INTRODUCTION AND PROBLEM STATEMENT

Experts agree that the grave shortage of skilled and top managerial human resources are jeopardising economic development and productivity growth of South Africa (Human, 1989; Hofmeyr, 1990; Piliso, 1993; Mbeki, 1996). Business schools offering MBA programmes are pivotal roleplayers in developing managerial competence and cannot escape their responsibility to deliver appropriately educated business executives who, through their intellectual skills and community sensitive values, may lead future transformation processes.

Despite the brisk demand for MBA graduates during the past two decades and the distinctive standing of the MBA degree in the marketplace, voices challenging this high estimate of the value of an MBA education are increasingly heard. Some of the criticisms include the following (Pesulima, 1990: 13-22; Neelankavil, 1994: 39; Yucelt, 1998: 27):

- MBA graduates are ill-equipped to cope with or meet the challenges of a dynamic and global environment.
- Lecturers at business schools lack the necessary business experience.
- Many MBA courses are too theoretically inclined.
- Liaison between business schools and stakeholders is inadequate.
- There is an overemphasis on quantitative subject disciplines, while the development of people skills is neglected.

Another major reproach is that the programmes offered by some Business Schools are ill focused on the real problems of business. This is partly attributed to the extensive proliferation of the MBA degree currently taking place, which is perceived to have resulted in a lowering of standards. South Africa is no exception to this (Brunner & Kellar, 1997: 32-33; De Vos, 1997: 17). It has therefore become very important that employers confirm that the institution through which the MBA degree was obtained is of good repute (Byrne, 1997: 5; PMR, 1997: 23). Impetus has been given to this criticism by the increasing number of franchise operations, acting on behalf of principals based abroad, that endorse the quality and delivery of programmes. There is, however, no guarantee that the learning outcomes and delivery modes of such operators are

on standard. Considering the world-wide disparity in the delivery modes of MBA programmes, evidence exists that some business schools fail to meet the needs and expectations of business practice (Hofmeyr, 1990; Neelankavil, 1994: 39).

Against this background, the aim of this research was to establish whether the curricula offered by business schools in South Africa are relevant to the current and future needs of business practice in a dynamic business environment. Another important question was whether the MBA programmes have met the expectations of the graduates themselves. Hence this paper's focus is on the empirical findings of graduate versus employer perceptions of the relative importance of core courses presented at South African business schools as well as the relevance of the management skills and traits required by business practice.

2 PREVIOUS RESEARCH: A SUCCINCT OVERVIEW

International and national data searches of existing MBA programmes have revealed that previous research focused primarily on aspects such as:

- Psychological factors: the influence of the MBA degree on the graduate and his/her immediate family and gender issues, etc. (De la Rey, 1977; Louis, 1978; Geromel, 1993).
- Management education and assessment of training needs (Beyers, 1977; Van Schalkwyk, 1982; Slabbert, 1987; Pesulima, 1990; Alberts, 1994).
- Business schools' strategic management of change, and strategic marketing (Lazarow, 1979; Williams, 1993; Malan, 1994).
- Best business school ranking and ratings (Bickerstaffe, 1996; Byrne, 1997; PMR, 1997).

Although previous research on aspects such as the ranking of business schools could be identified, no trace of research on the relative importance of core courses and management skills and traits pertaining to the MBA degree in South Africa could be found.

3 PURPOSE, OBJECTIVES AND HYPOTHESES OF THIS RESEARCH

As stated, this paper reports on the research findings of MBA graduates and employers on the relative importance of core courses presented at South African Business Schools as well as the management skills and traits as required by business practice. The findings reported in this paper form part of a more comprehensive problem definition in which the status and nature of South African MBA programmes were assessed (Louw, 1999). Towards this end, two independent empirical surveys were conducted. The first survey focused on the perceptions and experience of MBA graduates of such programmes, whilst the second survey canvassed the opinions of employers (business practice) with regard to the status and quality of the MBA degree.

The research objectives were as follows:

- 1 To compare and contrast the opinions of these two groups of respondents on the relative importance of core courses for running a business;
- 2 To compare and contrast the opinions of these two groups of respondents on the relative importance of management skills and traits required in the work environment;
- 3 To extract factors relating to the importance of:
 - core courses; and
 - management skills and traits;
- 4 To compare and contrast the perceptions of graduates and employers regarding the identified factors (core courses, management skills and traits).

The associated null hypotheses read as follows:

Ho¹ : There are no statistically significant differences between graduates' and employers' perceptions relating to:

Ho^{1.1} : the relative importance of core courses for running a business (refer objective 1); and

Ho^{1.2} : the relative importance of management skills and traits required in the work environment (refer objective 2).

Ho² : There are no statistically significant differences between graduates' and employers' perceptions relating to factors extracted from:

Ho^{2.1} : the relative importance of core courses for running a business (refer objective 4); and

Ho^{2.2} : the relative importance of management skills and traits required in the work environment (refer objective 4).

4 RESEARCH DESIGN AND METHODOLOGY

4.1 SELECTION OF THE SAMPLE AND EXTENT OF RESPONSE

To objectively assess the perceptions pertaining to the above-mentioned research objectives, two empirical investigations were performed by means of questionnaires, aimed at two population strata. The surveys were conducted under the auspices of the Centre for Applied Business Management of the University of Port Elizabeth.

In canvassing the perceptions and opinions of the *MBA graduates*, use was made of the Human Sciences Research Council's (Pretoria, South Africa) register of MBA students who graduated in the period 1985 to 1995 from business schools at South African universities. Questionnaires were mailed to the total population of 3 430 MBA graduates on the address list who were still resident in South Africa. A total of 633 usable questionnaires were received and

used in the analysis. Eliminating the unusable questionnaires (that were marked “address unknown” or were incomplete), a response rate of 19.3 per cent was achieved. No follow-up was necessary, as the number of responses (N = 633) was considered satisfactory and representative of the population strata. In addition to the information supplied in the questionnaires, numerous opinions, personal experiences, views and recommendations with regard to the development of MBA programmes in South Africa were received from respondents.

In order to obtain *employers'* perceptions and opinions of MBA graduates, use was made of the South African Board for Personnel Practice's register of Human Resources Managers (May 1997). Questionnaires were subsequently mailed to the total population of 3 200 Human Resources Managers. After a follow-up exercise, a total of 245 usable questionnaires, which represents a response rate of 7.89 per cent, were received and used in the analysis. For statistical purposes, the number of useable questionnaires was considered adequate for further analysis. As was the case of with the graduate group, numerous opinions, personal experiences, views and recommendations with regard to the development of MBA programmes in South Africa were received from these respondents.

4.2 STRUCTURE AND RELIABILITY OF THE QUESTIONNAIRE

Postal questionnaires were used as research instruments. The Graduate Questionnaire consisted of five sections. Section A proposed to gauge the relative importance of subject disciplines (core courses) and the quality of tuition received. Section B proposed to assess the relative importance of skills and traits essential to successful job performance, as well as the extent to which tuition actually developed these abilities. Section C canvassed the opinions of respondents on the various outcomes of the MBA programme, while Section D dealt with the quality of the MBA programme. Section E covered biographical information on respondents.

The Employer Questionnaire consisted of four sections. Section A gauged the relative importance of subject disciplines (core courses) and the proficiency of MBA graduates in these disciplines. Section B proposed to assess the relative importance of skills and traits as required in the work environment, as well as the proficiency of MBA graduates in these abilities. Section C canvassed the opinions of respondents on the profile of MBA graduates, while Section D covered biographical information on respondents.

As stated in the purpose and objectives, this paper will report on the findings made under Sections A and B of the aforementioned research instruments.

The questionnaires contained carefully phrased statements and/or questions to which the respondents had to respond by means of a continuous Likert five-point scale. The research instruments were subjected to testing in a pilot study consisting of 30 MBA graduate and 30 employer respondents. In addition to the pilot study, sections of both the research instruments had been tested in previous research (Pesulima, 1990; Bosch, Radder, Tait & Venter, 1994; Byrne, 1997).

The BMDP Statistical Program 1D (Frane, Jennrich & Sampson, 1990) was used to calculate mean values and standard deviations. Descriptive statistics were reported and the rankings were determined by means of summary statistics. By using the intercorrelations of the responses, the data was subjected to factor analyses (BMDP 4M), with the objectives of identifying possible communalities and extracting factors. To compare the profiles of the respondent groups, use was made of the BMDP program 3D for the Hotelling T^2 and two-sample t-tests (Hair, Anderson, Tatham & Black, 1995: 25, 262 - 265, 285 - 281). The significant p-values were Bonferroni adjusted (Hair & Anderson *et al.*, 1995: 285 - 281).

To verify the consistency of the inter-item reliability of the questionnaires, Cronbach alpha reliability coefficients were calculated. Reliability coefficients lower than 0.60 were deemed to be questionable, those close to 0.70 as acceptable, while coefficients larger than 0.80 were regarded as good (Sekaran, 1992: 174, 284, 287). The Cronbach alpha coefficients for graduates were:

items relating to the relative importance of core courses: 0.8027; the relative importance of management skills and traits: 0.9423; outcomes of the MBA programme: 0.8011; and the quality of the MBA programme: 0.9035. The Cronbach alpha coefficients for employers were: items relating to the relative importance of core courses: 0.84; the relative importance of management skills and traits: 0.96; and the profile of the ideal MBA graduate: 0.76. The reliability of the research instruments can therefore be regarded as good.

5 MAIN FINDINGS

5.1 RELATIVE IMPORTANCE OF CORE COURSES

A total of eleven courses that usually form the core of courses offered in the MBA programme, were identified and listed in the research. The core disciplines were identified by scrutinising the programme brochures of South African business schools. To achieve research objective 1 and to test hypothesis Ho^{1.1}, the responses pertaining to the core courses are reflected in Table 1. The MBA graduate respondents' ratings of the relative importance of core courses are shown in Panel A of Table 1, while Panel B indicates the employer respondents' ratings of the relative importance of core courses. To establish the differences between the perceptions of the two groups of respondents, the differences between the rating percentages (Panel B minus Panel A) were calculated, as shown in Panel C. The responses to all questions were converted to mean and standard deviation values. A further linear transformation was performed to map the five-point scale to a relative rating percentage, i.e. 1 = 0 per cent; ...; 3 = 50 per cent; ...; 5 = 100 per cent.

As the views and opinions of the graduates and employers with regard to the core courses tend to overlap, as is evident from Panels A and B of Table 1, this aspect will not be further discussed.

Table 1: MBA graduate and employer perceptions of the relative importance of core courses (N = 878)

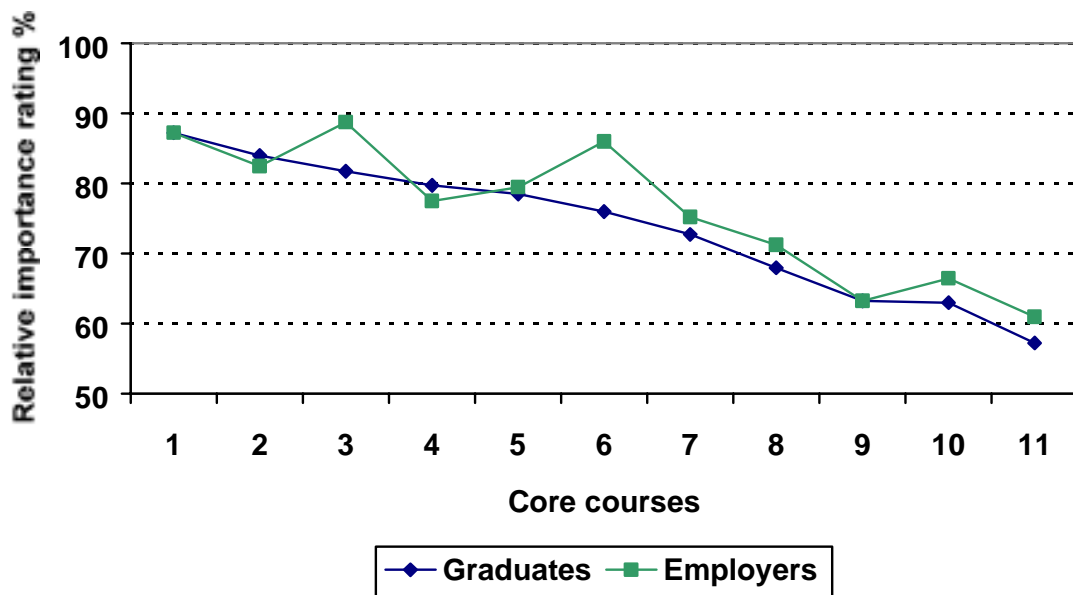
Core courses	Panel A: MBA graduates' perceptions (N = 633)				Panel B: Employers' perceptions (N = 245)				Panel C: Differences in perceptions	
	Ranking	Rating %	Mean	Standard deviation	Ranking	Rating %	Mean	Standard deviation	Ranking	Rating % difference
Strategic Management	1	87.25	4.49	0.72	2	87.25	4.49	0.75	8	0.00
Financial Management and Management Accounting	2	84.00	4.36	0.74	4	82.50	4.30	0.74	10	-1.50
General/Business Management	3	81.75	4.27	0.81	1	88.75	4.55	0.66	2	7.00 **
Marketing Management	4	79.75	4.19	0.73	6	77.50	4.10	0.86	11	-2.25
Entrepreneurship	5	78.50	4.14	0.88	5	79.50	4.18	0.98	7	1.00
Human Resources Management	6	76.00	4.04	0.84	3	86.00	4.44	0.77	1	10.00 **
Management Information Systems/Information Technology	7	72.75	3.91	0.90	7	75.25	4.01	0.88	6	2.50
Production/Operations Management	8	68.00	3.72	0.84	8	71.25	3.85	0.84	5	3.25
Legal and Business Environment	9	63.25	3.53	0.91	10	63.25	3.53	0.95	8	0.00
Economics	10	63.00	3.52	0.94	9	66.50	3.66	0.98	4	3.50
Quantitative Methods and Data Analysis	11	57.25	3.29	0.95	11	61.00	3.44	1.02	3	3.75

* Significant at 95% confidence level ($p \leq 0.0009$)

** Significant at 99% confidence level ($p \leq 0.0002$)

A global test, Hotelling T^2 , was performed to compare the profile (overall opinions) of the MBA graduates with that of the employers, based on the relative importance ratings given to core courses (refer Table 1, Panels A and B). The calculated Hotelling T^2 of 81.6720 ($p \leq 0.00005$) confirmed that the profiles differed significantly at the 99 per cent confidence level. As Graph 1 indicates the employer group perceived the core courses as more important than the graduate group.

Graph 1: MBA graduate and employer profiles: core courses



KEY TO GRAPH 1: The core courses numbered 1 to 11 are according to Panel A in Table 1.

Two-sample t-tests were performed for all rating percentage differences in Panel C of Table 1. The statistically significant p-values are indicated by means of asterisks. A positive rating percentage difference implies that the applicable core course was perceived to be of greater importance by the employers than by the graduates. Inversely, a negative rating percentage difference means that the MBA graduates perceived the core course to be more important than the employers.

Panel C of Table 1 can therefore be interpreted as follows:

- The two-sample t-tests for the individual core courses revealed that only two courses, namely *General/Business Management* (rating difference of 7 per cent) and *Human Resources Management* (rating difference of 10 per cent) were statistically significant at the 99 per cent confidence level ($p \leq 0.0002$).
- The MBA graduates rated *Financial Management and Management Accounting* (rating difference of -1.5 per cent) and *Marketing Management* (rating difference of -2.25 per cent) as more important than did the employers.

Based on the above-mentioned findings, it can be concluded that hypothesis $H_0^{1.1}$ is rejected in respect of two of the eleven core courses, as shown in Table 1.

5.1.1 Factor analysis of core courses

A factor analysis was done for the core courses. The principal component analysis technique was used by the BMDP program 4M to extract the factors. Direct quartimin oblique rotation was used to allow for probable intercorrelations between the factors. The scores of the respondents on the relative importance of core courses were fed into the program, with no restriction on the number of factors. Kaiser's Rule was used to establish the number of factors, i.e. factors with eigenvalues of greater than one were retained.

During the factor analysis on the importance of the eleven core course groupings, two factors were identified. Only one iteration was required, and ten of the original eleven items loaded on two factors. The sorted rotated factor matrix for the core courses appears in Table 2. Factor loadings lower than 0.3 are omitted for ease of reading.

Factor 1 groups together six of the core courses that usually form the basis of courses in the MBA programme that are of a more quantitative nature. The exception in this grouping is *Legal and Business Environment*, which contains some qualitative dimensions. These core courses are often referred to as the “hard” courses, as they require mathematical and analytical skills. Factor 1 is therefore labelled as “quantitative courses”. The core courses that are of a more qualitative nature are grouped under Factor 2. These courses, sometimes referred to as the “soft” courses, require proficiency in interpersonal relationships, conceptual abilities, and leadership. Factor 2 is therefore labelled “qualitative courses”.

Table 2: A sorted rotated factor matrix for core courses

Core courses	Factor 1	Factor 2
Quantitative Methods and Data Analysis	0.812	
Economics	0.735	
Legal and Business Environment	0.704	
Production/Operations Management	0.555	
Management Information Systems/Information Technology	0.554	
Financial Management and Management Accounting	0.536	
General/Business Management		0.855
Strategic Management		0.692
Human Resources Management		0.571
Entrepreneurship		0.571
Variance explained	3.4989	
Percent of total variance explained	35.0%	
Total % variance explained = 46.3%		
Cronbach's alpha	0.76	0.60

The groupings obtained through the factor analysis point towards specific realities that support the literature in this regard. The Cronbach alpha coefficients for the two factors are 0.76 and 0.60, which can be regarded as acceptable proof of the factors' reliability.

5.2 RELATIVE IMPORTANCE OF MANAGEMENT SKILLS AND TRAITS

This section compares the perceptions of the two respondent groups with regard to the relative importance of *Management Skills and Traits*. The purpose is therefore related to objective 2 and hypothesis Ho^{1,2}. The findings pertaining to management skills and traits are presented in Table 3. As for core courses, Panel C of Table 3 focuses on the rating difference percentages between the MBA graduates' and employers' perceptions of the relative importance of management skills and traits.

For both groups of respondents, Panels A and B show that, without exception, high relative importance ratings were assigned to all 37 skills and traits listed. Further, the range of mean scores was relatively small (for example, in Panel A: *Leadership* = 4.56 and *Interest and Studiousness* = 3.54; and Panel B: *Leadership* = 4.59 and *Interest and Studiousness* = 3.76), indicating strong support that the skills and traits listed in the research instruments are strongly in demand (i.e. relevant) in business practice.

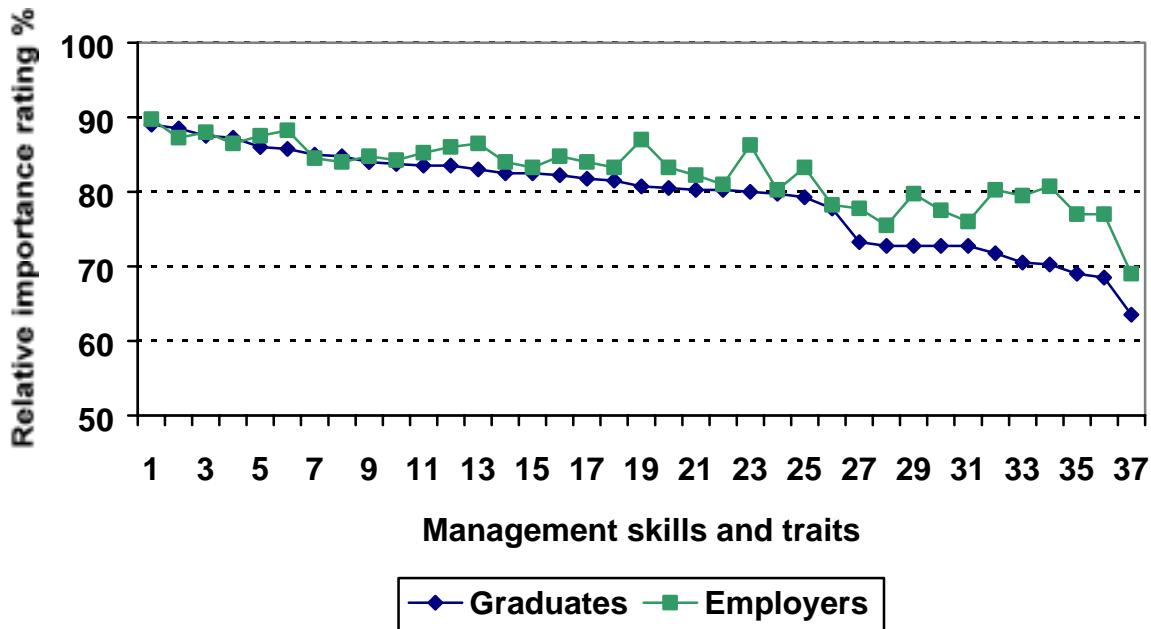
As for the core courses, the Hotelling T² was performed to compare the profile of the MBA graduates with that of the employers. The calculated Hotelling T² of 161.4649, $p \leq 0.00005$ confirmed that the profiles differed significantly at the 99 per cent confidence level. As depicted in Graph 2, the employer group regarded the management skills and traits as more important than did the MBA group.

Table 3: MBA graduates' and employers' perceptions of the relative importance of various management skills and traits (N = 878)

Skills and traits	Panel A: MBA graduates' perceptions (N = 633)				Panel B: Employers' perceptions (N = 245)				Panel C: Differences in perceptions	
	Ranking	Rating %	Mean	Standard deviation	Ranking	Rating %	Mean	Standard deviation	Ranking	Rating % difference
Leadership	1	89.00	4.56	0.62	1	89.75	4.59	0.74	26	0.75
Creative thinking and initiatives	2	88.50	4.54	0.60	5	87.25	4.49	0.74	37	-1.25
Analytical thinking and problem solving	3	87.50	4.50	0.64	3	88.00	4.52	0.66	30	0.50
Holistic (systems) thinking	4	87.25	4.49	0.69	7	86.50	4.46	0.72	35	-0.75
Ability to convey a strong sense of vision	5	86.00	4.44	0.70	4	87.50	4.50	0.69	24	1.50
Decision-making skills	6	85.75	4.43	0.65	2	88.25	4.53	0.71	17	2.50
Driving force and motivation	7	85.00	4.40	0.71	14	84.50	4.38	0.72	34	-0.50
Self-confidence and decisiveness	8	84.75	4.39	0.69	17	84.00	4.36	0.73	35	-0.75
Negotiating skills	9	84.00	4.36	0.72	12	84.75	4.39	0.76	26	0.75
Motivating skills	10	83.75	4.35	0.66	15	84.25	4.37	0.73	30	0.50
Planning skills	11	83.50	4.34	0.66	11	85.25	4.41	0.69	22	1.75
Pro-activity	12	83.50	4.34	0.73	10	86.00	4.44	0.73	17	2.50
Ability to accept responsibility	13	83.00	4.32	0.75	8	86.50	4.46	0.73	13	3.50
Working in teams	14	82.50	4.30	0.76	18	84.00	4.36	0.75	24	1.50
Entrepreneurial skills	15	82.50	4.30	0.79	22	83.25	4.33	0.82	26	0.75
Clear oral communication	16	82.25	4.29	0.70	13	84.75	4.39	0.76	17	2.50
Organising skills	17	81.75	4.27	0.68	16	84.00	4.36	0.72	20	2.25
Ability to delegate	18	81.50	4.26	0.75	20	83.25	4.33	0.75	22	1.75
Accountability	19	80.75	4.23	0.82	6	87.00	4.48	0.72	7	6.25**
Clear written communication	20	80.50	4.22	0.72	21	83.25	4.33	0.77	15	2.75
Interpersonal (networking) skills	21	80.25	4.21	0.76	23	82.25	4.29	0.82	21	2.00
Sensitivity to business environment	22	80.25	4.21	0.77	24	81.00	4.24	0.77	26	0.75
Business ethics and integrity	23	80.00	4.20	0.85	9	86.25	4.45	0.76	7	6.25**
Time management	24	79.75	4.19	0.80	26	80.25	4.21	0.79	30	0.50
Mental agility	25	79.25	4.17	0.76	19	83.25	4.33	0.71	12	4.00
Command of basic facts	26	77.75	4.11	0.78	30	78.25	4.13	0.80	30	0.50
Controlling skills	27	73.25	3.93	0.83	31	77.75	4.11	0.88	11	4.50
Social skills and abilities	28	72.75	3.91	0.83	36	75.50	4.02	0.86	15	2.75
Facilitating skills	29	72.75	3.91	0.84	28	79.75	4.19	0.79	6	7.00**
Ability to cooperate	30	72.75	3.91	0.85	32	77.50	4.10	0.79	10	4.75
Computer literacy (PC)	31	72.75	3.91	0.92	35	76.00	4.04	0.84	14	3.25
Ability to interpret instructions correctly	32	71.75	3.87	0.92	27	80.25	4.21	0.82	3	8.50**
Emotional stability	33	70.50	3.82	0.90	29	79.50	4.18	0.84	2	9.00**
Coaching skills	34	70.25	3.81	0.84	25	80.75	4.23	0.81	1	10.50**
Numerical skills	35	69.00	3.76	0.88	33	77.00	4.08	0.79	5	8.00**
Supervisory skills	36	68.50	3.74	0.88	34	77.00	4.08	0.92	3	8.50**
Interest and studiousness	37	63.50	3.54	0.86	37	69.00	3.76	0.79	9	5.50*

* Significant at 95% confidence level ($p \leq 0.0009$)** Significant at 99% confidence level ($p \leq 0.0002$)

Graph 2: MBA graduate and employer profiles: management skills and traits



KEY TO GRAPH 2: The management skills and traits, numbered 1 to 37, are according to those listed in Panel A of Table 2.

As in the case of the core courses, two-sample t-tests were performed for all rating percentage differences in Panel C, Table 3. A closer inspection of Panel C reveals the following:

- Nine of the 37 *Management Skills and Traits* differed significantly statistically. *Management Skills and Traits* that were significant are: *Accountability*; *Business Ethics and Integrity*; *Facilitating Skills*; *Ability to Interpret Instructions Correctly*; *Emotional Stability*; *Coaching Skills*; *Numerical Skills*; *Supervisory Skills*; and *Interest and Studiousness*.

These findings imply that the employers rated these nine skills and traits significantly higher than did the MBA graduates.

- All the other relative importance differences were positive, except for *Creative Thinking and Initiatives* (rating difference of –1.25 per cent), *Holistic Thinking and Self-confidence and Decisiveness* (rating difference of –0.75 per cent each), and *Driving Force and Motivation* (rating difference of –0.50 per cent). This implies that the graduates generally regarded these skills and traits as more important than did the MBA employers.

Based on the above, it can be concluded that hypothesis Ho^{1,2} is rejected in respect of nine of the 37 management skills and traits listed in Table 3.

5.2.1 Factor analysis of management skills and traits

A factor analysis (refer research objective 3) was also performed of the 37 Management Skills and Traits (as listed in Table 3) that are essential in the work environment. The same procedure was used as previously described. The sorted rotated factor loadings for the importance of *Management Skills and Traits* appear in Table 4. After a number of iterations were performed to eliminate items with maximum factor loadings of less than 0.3 and items with factor loadings greater than 0.3 on more than one factor, it was found that 21 of the original 37 items loaded on three factors. As the Cronbach alpha coefficients were all greater than 0.78, these factors were regarded as reliable measures.

The rotated sorted factor matrix for *Management Skills and Traits* is presented in Table 4. An analysis of Table 4 reveals the following:

- Nine items loaded on Factor 1. These items are all essential in a transformational leadership role, namely *High-level Conceptual Skills (Ability to Convey a Strong Sense of Vision, Entrepreneurial Skills, Creative Thinking and Initiatives, Leadership, Holistic (systems) Thinking), Interpersonal and Communication Skills (Networking Skills and Working in Teams), and Personal Skills (Pro-activity, Business Ethics and Integrity)*.

Table 4: A sorted rotated factor matrix for management skills and traits

Skills and traits	Factor 1	Factor 2	Factor 3
Ability to convey a strong sense of vision	0.794		
Entrepreneurial skills	0.752		
Creative thinking and initiatives	0.655		
Leadership	0.605		
Business ethics and integrity	0.567		
Interpersonal (networking skills)	0.545		
Holistic (systems) thinking	0.538		
Working in teams	0.534		
Pro-activity	0.499		
Planning skills		0.844	
Organising skills		0.836	
Time management		0.738	
Controlling skills		0.712	
Analytical thinking and problem solving		0.406	
Computer literacy		0.328	
Clear written communication			0.718
Ability to cooperate			0.698
Interest and studiousness			0.692
Clear oral communication			0.662
Emotional stability			0.617
Command of basic facts			0.516
Variance explained	7.4504	1.4569	1.2991
Percent of total variance explained	35.5%	6.9%	6.2%
Total % variance explained = 48.6%			
Cronbach's alpha	0.84	0.80	0.79

- Factor 2 primarily relates to the six traditional management skills that ensure organisational efficiency. *Analytical Thinking and Problem Solving*, which are conceptual skills, are also included in this factor. The latter skills are, however, essential in applying the remaining five traditional management skills successfully.

- Six items loaded on Factor 3. These items are all related to the ability to communicate, cooperate and learn (*Interest and Studiousness*). Seemingly, the only odd item was *Command of Basic Facts*. However, factual information is necessary to communicate and learn effectively.

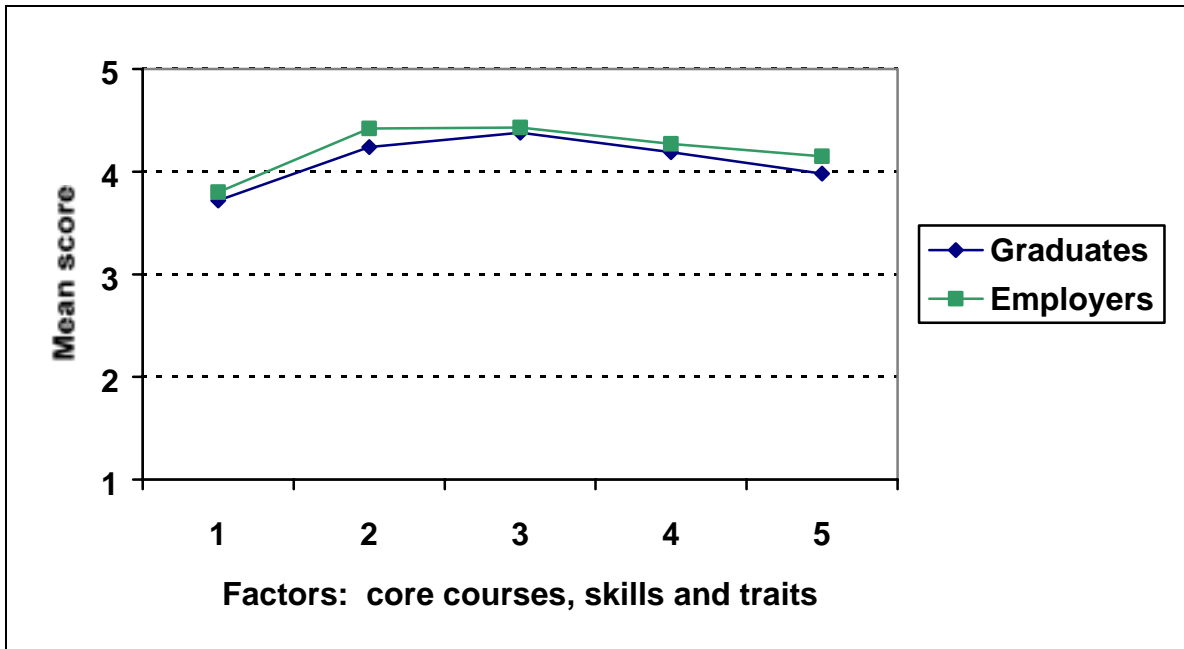
5.3 FINDINGS ON THE RELATIONSHIPS BETWEEN MBA GRADUATE AND EMPLOYER PERCEPTIONS AND THE IMPORTANCE OF CORE COURSES, MANAGEMENT SKILLS AND TRAITS

This section focuses on research objective 4 and the testing of hypothesis Ho². To achieve this, two-sample t-tests were performed, which indicated the following statistically significant relationships (95 per cent confidence level):

- Employers regarded qualitative core courses as more important than did MBA graduates (mean scores of 4.42 versus 4.24; p-value 0.0000); and
- The ability to communicate, cooperate and learn was regarded as more important by employers than by MBA graduates (mean scores of 4.15 versus 3.98; p-value 0.0001).

Further, the Hotelling T² tests indicated that differences between the two profiles, specifically in respect of qualitative core courses and the ability to communicate, co-operate and learn were found to be significant at the 99 per cent confidence level (Hotelling T² of 33.3534, p≤0.00005) as shown in Figure 3

Graph 3: Profile of MBA graduates' and employers' perceptions pertaining to factors extracted from core courses, management skills and traits



KEY TO FIGURE 3.1: 1 = Quantitative core courses, 2 = Qualitative core courses, 3 = Transformational Leadership Skills, 4 = Traditional Management Skills, 5 = Ability to Communicate, Co-operate and Learn.

From figure 3 it is evident that there were significant differences between the two profiles, specifically in respect of qualitative core courses and the ability to communicate, co-operate and learn.

The above findings imply that $H_o^{2.1}$ and $H_o^{2.2}$ should be rejected.

6 CONCLUSIONS

6.2 CORE COURSES

- The high ratings by both graduates and employers for the core courses endorse the paradigm that cross-functional interdisciplinary (generalist) MBA programmes are in demand.

- Core courses were ranked very similarly by the graduates and employers, although employers' ratings were generally higher than those of MBA graduates.
- The statistical significant relationship (99 per cent confidence level) between the two groups of respondents with regard to *Human Resources Management* could be attributed to the fact that the employer respondents were all Human Resources Managers by profession.
- It was possible to group core courses into quantitative and qualitative categories by means of a factor analysis.

6.2 MANAGEMENT SKILLS AND TRAITS

- Both the MBA graduates and employers allocated high relative importance ratings to *Leadership, Creative Thinking and Initiative, Analytical and Holistic Thinking and Problem-solving*, as well as the *Ability to Convey a Strong Sense of Vision* - all critical elements of transformational leadership. In other words, both groups of respondents regarded high-level conceptual skills and traits as important.
- In addition to the above-mentioned skills and traits, the employer respondents also allocated high relative importance ratings to *Decision-making Skills, Pro-activity, the Ability to Accept Responsibility, Accountability, and Business Ethics and Integrity*. This implies that the employer group were particularly concerned about results and that the graduates should be able to make sound decisions and be accountable for their actions.

- *Management Skills and Traits* were ranked very similarly by the graduates and employers, although employers' ratings were generally higher than those of the MBA graduates.

6.3 HYPOTHESES

- $Ho^{1.1}$: There were statistically significant differences between the MBA graduates' and employers' perceptions of the relative importance of *General/Business Management* and *Human Resources Management*. Hypothesis $Ho^{1.1}$ is therefore rejected.
- $Ho^{1.2}$: Statistically significant differences were found between the MBA graduates' and employers' perceptions on the relative importance of:
 - *Accountability; Business Ethics and Integrity; Facilitating Skills; Ability to Interpret Instructions Correctly; Emotional Stability; Coaching Skills; Numerical Skills; and Supervisory Skills*, at the 99 per cent confidence level ($p \leq 0.0002$).
 - *Interest and Studiousness*, at the 95 per cent confidence level ($p \leq 0.0009$).

Based on the above findings, Hypothesis $Ho^{1.2}$ is rejected.

- $Ho^{2.1}$: Statistically significant differences were found between the MBA graduates' and employers' perceptions of qualitative core courses. Hypothesis $Ho^{2.1}$ is therefore rejected.
- $Ho^{2.2}$: The differences between the MBA graduates' and employers' perceptions of the importance of the *Ability to Communicate, Cooperate and Learn*, were found to be statistically significant. Hypothesis $Ho^{2.2}$ is therefore rejected.

6.4 IMPLICATIONS

The findings highlight the need for increased liaison and networking between South African business schools and business practice. The employers' opinions and viewpoints could be considered for inclusion in the MBA programme in order to narrow the so-called gap between theory and practice and meet the needs of business practice. Specific notice should be taken of the following courses, management skills and traits that were rated higher by employers than by graduates:

- Qualitative core courses such as *General and Business Management* and *Human Resources Management*.
- Management skills and traits such as *Accountability, Business Ethics and Integrity, Facilitating Skills, Ability to Interpret Instructions Correctly, Emotional Stability, Coaching Skills, Numerical Skills, Supervisory Skills* as well as *Interest and Studiousness*.

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