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Review

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Factors influencing students' choice of a B-school

Abstract

The presented study is a primary initiative in the Peruvian literature for understanding the factors which influence undergraduate students´ choice of a B-school offering a Master´s Degree in Business Administration. A self-administered questionnaire and focus group discussions were used in order to collect data from 700 respondents, with a usable response rate of 92%. Analysis of the data was carried on through exploratory factor analysis. The seven revealed factors which accounted for 63.2082% of the total variance were: Corporate Social Responsibility, Essentials of an MBA Program, Quality Yardsticks, Entrepreneurship, Location, MBA Technical Specifications, and Physical Facilities. Entrepreneurship education should be addressed primarily, as entrepreneurship is vital for economic growth in Peru. In order to raise their value proposition, B-schools are expected to take true initiatives in the CSR area and promote entrepreneurship education in their curricula, through both business-skills training and practical support given by the B-school.

Keywords: *business schools, business studies, curricula, emerging markets, factor analysis, higher education*

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Introduction

The Master´s Degree in Business Administration (MBA) is nowadays one of the most popular, desired, and valuable post-graduate degrees available worldwide. It is believed that an MBA degree provides its holders an added advantage to get promoted to upper management positions, as well as a premium salary in industry. As Sharkey and Beeman (2008) assessed, the MBA market will only tend to become a hypercompetitive market, given its connectedness to business. Despite various achievements, the evolution of the education system in Peru is relatively insufficient to meet the social needs of society. Moreover, little attention has been paid to education, and the authors of this study identified limited published research, in general, with regard to this topic. In the light of this situation, it is obvious that in order to improve the management education, it is necessary to understand the needs of the student and his decision-making process. B-schools have to dedicate themselves to finding out what the student is really looking for and hoping to accomplish as an MBA graduate and business professional, and to design MBA programs that emphasize just how they will meet those expectations.

Literature Review

Choosing a particular MBA program from so many options available on the market is definitely not an easy task. Some studies (Galotti, 1999; Simpson, 2001) indicated subjective elements as major criteria for undergraduates in choosing an MBA program in a particular B-school, such as: perception of self, individual interests, values and abilities, parental influence, and the student´s gender role identification, among other things. Kurst (1984) found placement office statistics, accreditation, supporting facilities, faculty make-up, and student/faculty ratio; Miller (1988) found accreditation, teaching methods, program duration, fields of specialization, school ranking, and cost; Powers (1988) found academic quality, quality and reputation of the faculty, and placement opportunities; Parker, C. Pettijohn, and L. Pettijohn (1989) found educational attainments of faculty, image of the university, placement records, research of faculty, and tuition costs; Linden, Brennan, and Lane (1992) found placement records, tuition fees, and average GMAT scores; Webb and Allen (1994) found academic reputation, accreditation, and tuition; Panitz (1995) found high quality teaching professors, knowledgeable both in theory and in practice, staff professionalism, supporting facilities, ethical

standards, image of the school. Bowers and Pugh (1973), Sevier (1987) found institutional status, programme structure, and practical issues (how long it takes and how much it costs). Byrne (1993) and Miller (1988) found curriculum and teaching methods. Schuster, Constantino, and Klein (1988) found tuition fees, supporting facilities, local accreditation, and overseas accreditation.

Methodology

The instrument

A survey was conducted to gather information in order to measure students' determinants of a B-school choice. The instrument of data collection, namely a structured questionnaire, was built based on the literature review and focus group discussions. The variables generated were afterwards included in a questionnaire in the form of 40 positively-worded statements to which students were supposed to respond by means of a seven-point Likert-type scale that varied from 1 – representing strong disagreement with the situation described – to 7 – representing strong agreement. A pilot study was undertaken with 63 students in order to test the instrument for face validity.

Selection of the final sample

The revised questionnaire was personally administered in and around campus by the authors to a number of undergraduate students who were selected based on probability and non-probability sampling from the 10 top universities in Lima, Peru. A two-fold sampling procedure was used for the presented study, namely stratified random sampling and convenient sampling, where each stratum was represented by a university listed in the top 10 universities in Lima, as published by the America Economía in 2012. Out of these 10 universities, three were public and seven private. For each stratum, convenient sampling was used to obtain the sought information.

For the given budget, it was only possible to collect 700 samples. The sample size in each stratum was allocated proportionally to the population size of the stratum, which is shown in Table 1. Of the questionnaires collected, about 8% were considered unusable due to insufficient and/or incomplete data, which resulted in a final sample of 641 valid questionnaires. The sample was representative of the population strata and had a strong representation of females. The sample consisted of 192 male respondents and 449 female respondents.

Table 1. Sampling plan

S. No	Name of Stratum (University)	Population	Proportion	S1	S2	S3	S4
1	Pontificia Universidad Católica del Peru[1]	17,531	0.1311	92	82	33	49
2	Universidad Nacional Mayor de San Marcos[2]	28,645	0.2142	150	141	56	85
3	Universidad Peruana Cayetano Heredia[1]	3,536	0.0264	18	15	6	9
4	Universidad del Pacifico[1]	2,179	0.0163	11	11	4	7
5	Universidad de Lima[1]	14,109	0.1055	74	68	27	41
6	Universidad Nacional de Ingenieria[2]	11,034	0.0825	58	55	22	33
7	Universidad de Piura[1]	5,232	0.0391	27	24	10	14
8	Universidad Nacional Agraria La Molina[2]	4,903	0.0367	26	24	10	14
9	Universidad de San Martin de Porres[1]	31,046	0.2322	163	147	59	88
10	Universidad Peruana de Ciencias Aplicadas[1]	15,504	0.1159	81	74	30	44
		133,719	1	700	641	257	384

Note. 1 – Private university, 2 – Public university; S1 – Sample size in each stratum, S2 – Sample size in each stratum, after the removal of the invalid questionnaires, S3 – Sample size of each stratum, within the sample of 257 questionnaires, S4 – Sample size of each stratum, within the sample of 384 questionnaires.

Data analysis

We carried out a series of association tests for the various demographic variables in relation to the type of the university. Table 2 presents the relevant statistics. Since Cramer's V is close to zero in all of the cases with significant value higher than 0.05 and the mean square canonical correlations between the demographic variables are almost zero, hence, it can be concluded that there is no association between the type of university and other demographic variables, namely gender, age, and income.

For statistical purposes, the number of final questionnaires was considered adequate for further analysis of the data, which was then carried out using factor analysis. The subjective element of factor analysis was reduced by splitting the valid sample of questionnaires randomly into two, one sample of 257 and the other one of 384 questionnaires, based on the 40–60% rule of thumb. The last two columns of Table 1 represent the allocation of samples to the strata based on the

Table 2. Association test for various demographic characteristics

Association	Cramer's V	Mean square canonical correlation	Sig.
Gender vs. Type of the university	0.072	0.005	0.067
Age vs. Type of the university	0.058	0.003	0.338
Income vs. Type of the university	0.043	0.002	0.883

said rule. Then factors were extracted separately from both groups, which resulted in identical factors, thus the analysis was reliable.

Results

The analysis made use of the *varimax* factor rotation procedure. Only items with factor loading of.40 and over were considered significant in interpreting the factors. This criterion reduced the number of items to 39 from the original 40. The factor analysis revealed the existence of seven factors.

Inference based on 40%, 60%, and 100% of the sample

Bartlett's test of sphericity was found to be highly significant for 40%, 60%, and 100% of the sample with a p =.000, implicating correctness and suitability of factor analysis processes for testing multidimensionality. Moreover, the Kaiser-Meyer-Olkin measure of sampling adequacy gave satisfactory.683,.660, and.680, respectively.

For both samples, out of the 39 items, seven factors were produced. The factors that emerged from the study were given appropriate names in accordance with the criteria, namely Corporate Social Responsibility (Factor 1 – F1); Essentials of an MBA Program (Factor 2 – F2); Quality Yardsticks (Factor 3 – F3); Entrepreneurship (Factor 4 – F4); Location (Factor 5 – F5); MBA Technical Specifications (Factor 6 – F6); Physical Facilities (Factor 7 – F7). The seven factors, when totalled, accounted for 62.4843% (for 40% of the sample), 64.0705% (for 60% of the sample), and 63.2082% (for the overall sample), respectively, of the variation in the data obtained.

The results of the factor analysis in terms of the rotated factor loading matrices for 40% of the sample, 60% of the sample, as well as for 100% of the sample can be seen in Table 3. It is to be noted that factor loadings for 60% and 100% of the sample are shown in the table taking into consideration the structure of 40% of the sample.

Table 3. Factor analysis – rotated component matrix

Factor	Variable Name (Variable #)	40%	60%	100%
F1	Recycling program (31)	0.8280	0.8347	0.7988
	The social impact activities (30)	0.8137	0.8014	0.8064
	The initiatives to reduce the CO_2 emissions (29)	0.8131	0.7886	0.8259
	Principles for environmental and social sustainability (35)	0.6907	0.7310	0.7184
	The ISO 14001 certification (33)	0.6803	0.6919	0.6851
	Social entrepreneurship courses (34)	0.5768	0.6075	0.6017
	Accreditation for CSR practices (32)	0.5260	0.4911	0.4987
F2	Extent of industry interaction (8)	0.8158	0.7815	0.7840
	High standard/ quality of teaching staff (2)	0.6617	0.6576	0.6653
	International recognition of the program (3)	0.6363	0.6600	0.6669
	The subjects/ courses in the MBA program (6)	0.6181	0.5064	0.5452
	Accreditation/ certification by AACSB, EQUIS, AMBAs (16)	0.5731	0.5400	0.5580
	The industry linkages/ tie-ups (9)	0.5541	0.4908	0.5049
	Other academic activities (17)	0.5064	0.5887	0.5649
	Extent of research activities (7)	0.4957	0.5019	0.5043
	The active business incubation centre (28)	0.4045		
F3	The public image held (14)	0.6960	0.7056	0.7118
	How old the B-school is (13)	0.6452	0.6667	0.6464
	Number of publications (18)	0.6221	0.6300	0.6226
	Number and kind of specializations offered (11)	0.6150	0.5980	0.6118
	International student exchange programs (15)	0.5909	0.6557	0.6393
	Academic reputation (27)	0.5861	0.5967	0.5811
	Networking opportunities (10)	0.5460	0.5457	0.5519
	International professors (22)	0.5279	0.4491	0.4741
F4	Interaction to set up a business after graduation (38)	0.8352	0.8584	0.8465
	Successful entrepreneurs prepared (36)	0.7573	0.8128	0.7944
	International dual degree program (39)	0.7486	0.7297	0.7340
	Industry relevant programs (37)	0.6251	0.7034	0.6802
	The active industry interaction centre (40)	0.5650	0.5606	0.5596
F5	City/ province that the B-school is in (26)	0.7545	0.8013	0.7934
	Distance from my residence (25)	0.6348	0.6783	0.6763
	Minimum transportation facility (4)	0.6251	0.5136	0.5566
	Distance from the main industrial area (24)	0.6155	0.6980	0.6713

Factor	Variable Name (Variable #)	40%	60%	100%
F6	Admission standards/ requirements (20)	0.7463	0.6807	0.7051
	The type of the MBA program (19)	0.7249	0.7646	0.7517
	The subjects covered in the MBA program (21)	0.6772	0.7373	0.7098
	The duration of the MBA program (23)	0.4563	0.4956	0.5064
F7	The size/ largeness of the B-school (12)	0.7764	0.7929	0.7918
	The kind of building (5)	0.7030	0.7599	0.7378
	Attractiveness of the campus (1)	0.6157	0.6555	0.6447

Reliability analysis

The Alpha values for the seven dimensions are 0.8843 (F1), 0.8524 (F2), 0.8518 (F3), 0.8581 (F4), 0.7242 (F5), 0.7442 (F6), and 0.7046 (F7), respectively, and the combined Alpha value for all the items is 0.9282 (cf., Table 4). Since Alpha values are exceeding the obligatory requirement of 0.70, this indicates that all items and factorial groups are sufficient reliable measures.

Table 4. Reliability analysis results

40% of the sample	Cronbach's Alpha	Mean	Variance	Hotelling's T-Squared	F	Sig.
F1	0.8827	5.0442	2.3713	246.6210	40.3007	0.0000
F2	0.8547	5.9134	1.1928	542.3215	75.6587	0.0000
F3	0.8408	5.5109	1.4962	432.9600	60.4018	0.0000
F4	0.8465	6.0326	1.2390	71.4435	17.6516	0.0000
F5	0.7291	5.4202	1.8783	127.2181	42.0747	0.0000
F6	0.7468	4.6109	2.3334	589.6063	195.0000	0.0000
F7	0.6835	4.2194	1.9801	14.2366	7.0905	0.0000
Overall	0.9280	5.3782	1.7273	5928.6191	129.4510	0.0000
60% of the sample	**Cronbach's Alpha**	**Mean**	**Variance**	**Hotelling's T-Squared**	**F**	**Sig.**
F1	0.8855	5.0631	2.2967	398.7984	65.5987	0.0000
F2	0.8511	5.8870	1.3680	704.5813	99.0776	0.0000
F3	0.8582	5.5057	1.6114	578.5982	81.3620	0.0000
F4	0.8652	6.0281	1.3020	93.3547	23.1559	0.0000
F5	0.7209	5.3711	1.9950	179.3038	59.4558	0.0000
F6	0.7425	4.5612	2.3923	870.4006	288.6185	0.0000
F7	0.7169	4.2296	2.1846	21.6008	10.7722	0.0000
Overall	0.9284	5.3661	1.8112	9149.8423	211.3340	0.0000

Full Sample	Cronbach's Alpha	Mean	Variance	Hotelling's T-Squared	F	Sig.
F1	0.8843	5.0555	2.3235	640.3385	105.8893	0.0000
F2	0.8524	5.8975	1.2965	1229.7485	174.0314	0.0000
F3	0.8518	5.5077	1.5629	1006.0110	142.3685	0.0000
F4	0.8581	6.0299	1.2749	163.5011	40.6837	0.0000
F5	0.7242	5.3908	1.9458	306.3347	101.7925	0.0000
F6	0.7442	4.5811	2.3659	1459.3683	484.9359	0.0000
F7	0.7046	4.2255	2.0994	35.8833	17.9136	0.0000
Overall	0.9282	5.3709	1.7752	14675.8667	353.9612	0.0000

The Hotelling's T-squared test was used as a multivariate analysis tool to evaluate the null hypothesis that all of the items on the scale would have the same mean. As expected, the null hypothesis was considered invalid for all the three groups of samples, 40%, 60%, and overall sample (cf., Table 4). Figure 1 shows the coefficient of variations (CV) and the mean scores of the factors for the split samples versus overall sample. It can be observed that F2 and F4 have relatively higher items consistency, while F6 and F7 have relatively low items consistency.

Thus, the statistical and factor analysis tests show that the proposed items and dimensions of the instrument of the study are sound enough to measure the perceptions of the undergraduate students regarding the factors influencing their choice of a B-school, and hence can be used for further analysis.
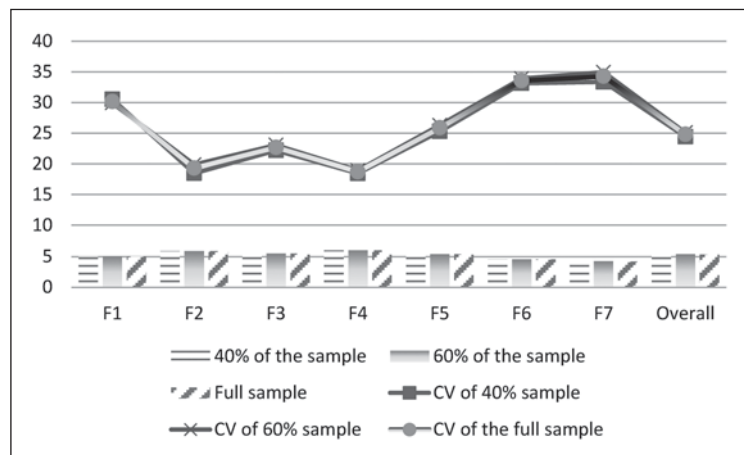

Figure 1. Coefficient of variations and the mean scores of the factors for the split samples versus overall sample.

Factors. Discussion

Since the results for 40% and 60% of the sample are very similar to the overall sample and do not bias the analysis, the main focus of the following discussion will be based on the overall sample.

Figure 2. Mean scores of the items for the split sample versus overall sample.

Factor 1: Corporate social responsibility

Factor 1 items seemed to reflect a clear indication of the tendency of Peruvian undergraduate students to cite CSR as an important criterion when deciding which B-school to join for their future MBA studies. Thus, Factor 1 was labelled as CSR. It is to be noted that CSR is still at its beginning stages in Peru and, furthermore, is not yet regarded as an important topic by the Peruvian policymakers, remaining a rather neglected area. However, the presented study suggests that the respondents have become more aware nowadays of how business activities affect society and the environment and they require more responsible management; hence, B-schools need to reconsider their value proposition and adopt strategies in order to offer an education that combines analytical capabilities and managerial skills with business ethics and CSR topics (Sanders, 2012).

Factor 2: Essentials of an MBA program.

The second factor (F2) was labelled Essentials of an MBA Program. Three out of the eight variables reached mean scores higher than 6, which highlighted the

importance that the undergraduate students attached to the quality of the teaching staff, international recognition of the program and the subjects/courses covered in the MBA program. However, the highest mean score was given to the item quality of the teaching staff (6.4695), which clearly states that students want to know if the MBA program is being taught by the school´s best faculty. It becomes obvious that B-schools in Peru should design effective strategies so as to recruit and retain high quality academic staff, which supports the findings of Temtime and Mmereki (2011).

Factor 3: Quality yardsticks

The next factor (F3) was called Quality Yardsticks, as all the variables were related to how the students measured the quality of a B-school. It is to be noted that one variable had a mean score greater than 6, which underlines networking opportunities as an important part of the B-school experience. In the case of Peru, this represents a very important cultural aspect, since networking with the B-school classmates is generally seen as an opportunity to find potential business partners, suppliers and/or customers for one´s business.

Factor 4: Entrepreneurship

It is to be noted that the fourth factor, called Entrepreneurship, is the only one that reported all its variables with mean scores close to or over 6, which clearly demonstrates the high importance of the necessity to foster entrepreneurship through both business-skills training and practical support given by the B-school. Peru is among the most enterprising countries in the world, with a significant number of young people developing businesses on their own most of the time, either because opportunities are abundant, or because they do not have other option for making a living. Moreover, Peru's micro and small business (MSE) sector plays a fundamental role in generating employment, if we take into consideration the number of about 2.5 million MSEs, both formal and informal. As Kirby (2004) stated, the challenge of B-schools is to develop more enterprising individuals, with entrepreneurial capabilities that will enable entrepreneurs to successfully meet the challenges of the business climate of the 21st century.

Factor 5: Location

The fifth factor was labelled Location of the B-school. By checking the mean scores, it can be observed that the variables with the highest importance are minimum transportation facilities and distance from one's residence, which demonstrates the preoccupation of the Peruvian undergraduate students for the

location of the B-school. Traffic conditions are a constant concern for students, as traffic jams are a common reality nowadays in Peru, not just during rush hours, but almost at every point of time in the day.

Factor 6: MBA technical specifications

The items loading on the sixth factor reflected the program structure in terms of program curriculum and mode of delivery (part-time, full-time, executive, online or distance education programs); thus, factor 6 was labelled MBA Technical Specifications. Among the variables, the duration of the MBA program was attached the highest average importance (with a mean score of 6.0265). It was found during focus group discussions that most undergraduate students did not show intentions of pursuing a doctorate degree after completion of the MBA program, as their solely reason to pursue an MBA in the first place was to acquire knowledge and develop skills that would allow them to be more productive in their workplaces; hence, earn more money. The sooner they finish their studies, the faster they can get back to work. Hence, in order to attract students, B-schools should design high quality MBA programs which are shorter in duration.

Factor 7: Physical facilities.

The last factor (F7) refers to physical facilities. It is to be noted that physical facilities represent a relatively less important criterion influencing Peruvian students' choice of a B-school, since the mean scores registered by the variables that compose this factor were the lowest ones among all the 39 variables. In consequence, it is rather clear that B-schools in Peru should focus less on this factor when designing strategies to attract new students. It is, however, important that B-schools provide a physical environment that is safe, comfortable, accessible, and aesthetically pleasing, which was also noted during the focus group discussions.

Conclusions

It is clear that choosing a B-school to pursue an MBA program represents a complex decision making process that is very carefully analysed by undergraduate students in general. Peruvian undergraduate students are not an exception. However, despite its relevance, it has been noticed that in the Peruvian education market, no academic research has been conducted on this topic. The presented study aimed, therefore, at discovering the key criteria that students consider when making

their choice of a B-school. The factor-analyzed data revealed seven underlying factors in the criteria used by undergraduate students when choosing a B-school: Corporate Social Responsibility, Essentials of an MBA Program, Quality Yard-sticks, Entrepreneurship, Location, MBA Technical Specifications, and Physical Facilities. The findings are quite interesting and diverse, as socio-cultural factors play a very important role in the results, by shaping the Peruvian undergraduate students' MBA choice behaviour. It has been found that in order to raise their value proposition, Peruvian B-schools are required to rebalance their curricula so as to provide their students with a deeper understanding of such phenomena as innovation, entrepreneurship, CSR, and business ethics, which seem to be the topics that need most attention in Peru. In other words, students are increasingly demanding softer skills, a finding which supports previous studies such as those by Cornuel (2007) and Hawawini (2005). Based on the above-mentioned findings, Peruvian B-schools which do not take the mentioned aspects into account should focus on implementing necessary changes so as to enhance the quality of their input and output, whereas B-schools which present the mentioned aspects should concentrate on improving them, in order to raise their present value proposition.

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