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#### **Research Paper**

## Recruitment, Hiring, and Competency Matching of University Graduates among Firms in Mexico

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**ABSTRACT:** This paper presents an overview of Mexican companies' recruitment and selection processes as well as the evaluation of the predominant exit competencies of recently graduated professionals from universities. Employing a survey with 1,019 human resource and area directors, a gap was identified between the priority importance firms attach to the exit competencies of college students and their satisfaction with the current competencies that the professionals demonstrate in Mexico. The results indicated opportunity areas in the competencies that companies value more, including teamwork, proactivity, leadership, entrepreneurship, communication, and the search and analysis of information. In addition, surprisingly to universities, the companies do not perceive as critical other competencies Mexican universities seek to encourage, such as experience abroad and civic responsibility.

**Keywords:-** Recruitment, Matching, Competencies, University Graduates

#### I. INTRODUCTION

The traditional process of hiring personnel in organizations is built on the idea that an individual who joins the organization already has a certain degree of productivity due to previously acquired knowledge and abilities; the company hires him or her in exchange for a wage that bears a certain relationship to that level of productivity. However, the process is more complex and certainly critical, as the individuals to be hired in an organization usually have different quality levels, even if they are not observable, and the organizations have different requirements; thus, when they manage to match the quality of the employee with what the position demands (in the present and his/her future career), the increase in productivity can be outstanding—even greater than would be expected in the traditional approach. Therefore, good matching in the recruitment of the human capital is in itself a potentially profitable process for both parties [1; 2]. It can promote significant increases in efficiency, as demonstrated by empirical studies of [3; 4].

In the terms of university graduates, their exit competencies are determined in part by the competencies the universities decide to develop in their students. Thus, it is profitable to universities to infer the competencies the organizations require; to a certain degree they do, but achieving the match is so complex that they will probably not coincide in all cases. Moreover, universities might also prefer certain competencies according to their own educative philosophy or, alternatively, the role they envision for their graduates in society might not match with what businesses desire. Therefore, as matching between individuals and organizations takes place (with the bonus of productivity that it entails), it depends not only on the efficiency with which the recruitment is done, but also on the matching of the competencies the universities look to develop and those the organizations demand.

The international experience demonstrates gaps in matching between the exit competencies and those required by the organizations [5; 6; 7; 8]. Similarly, recruitment in developed countries has become more intensive [9], resulting in more competition for candidates with professional skills seeking good jobs. As a result, it has become increasingly critical for organizations to attract talent by choosing the right option for both parties in the labor market (i.e., matching). Unfortunately, the volume of evidence on this topic is still scarce in emergent countries, especially in the case of Latin America. This research aims to contribute along this line by presenting the findings of a survey taken among more than 1,000 executives in Mexico—namely, human resource directors and area directors—from a sample of 500 medium-sized and large companies. The survey

enabled us to identify the more common recruitment practices and the degree of coincidence between the college students' competencies and those that the organizations require.

The first section of the article presents an analysis of the current condition of the higher education institutions and the labor market in Mexico. In the next sections, the findings of the field study are presented in terms of the process and the methods of recruitment and selection that the main companies of the country use. Finally, a matching or gap analysis is performed between the priority of the exit competencies area directors seek in university graduates and the matching they perceived with the competences universities developed in the professionals the organizations actually hired.

#### **Higher Education in Mexico and the Labor Market**

In recent decades, the demand for college education has expanded as has the number of institutions that provide it. During the last three decades, the number of students working toward a bachelor's degree has tripled, reaching an enrollment of 2,232,189 students [10]. Fig. 1 shows that, although public institutions have a relevant role in the formation of professionals in a country, the number of graduates from private universities has grown to account for almost a third of the total. In addition, according to the National Association of Universities and Institutions of Higher Education [11], higher education services are offered by 2,890 institutions: 1,111 public and 1,779 private.

Currently in Mexico there are just over 11 million people with a professional degree or postgraduate instruction in the economically active population (EAP) of Mexico, which represents nearly 15% of the total population. It is remarkable that this segment is the most dynamic, as it grows by 5% and 7% annually at the professional and postgraduate levels, respectively. This amount represents two and up to three times the growth of the total EAP. Although the accelerated growth is due in part to changes in the age structure of the population, it also reflects the growth in demand for higher education (see Table 1).

On the other hand, the composition of the professional workforce has undergone significant changes in terms of gender. In Mexico, the proportion of female students enrolled in college has increased from 48.9% in 1995 to 50.2% in 2009 [12]. This trend creates a challenge for Mexican recruiters because of the traditional reluctance to hire women for managerial positions [13]; it has also increased the demand for more flexible practices regarding schedules, home offices, and childcare benefits, thereby affecting the processes of recruitment and employability.

The growth in the labor force's education is not a phenomenon exclusive to Mexico, and it presents opportunities and challenges in recruitment processes for all companies. Generally speaking, the most effective recruitment programs are those that attract the largest number of applications, because "the more you have to choose from, the better choice you can make" [14]. In addition to the increased availability of professionals, the socio-economic and political changes and the advent of information technologies have produced new and more sophisticated recruitment and selection methods among professionals. The competition among recruiters of professional level graduates is high in Mexico; therefore, a variety of more effective recruitment and selection methods that ensure the quality of hired professionals has been generated [15]. Due to the offering of skilled people, recruiters worldwide have had to resort to specialized agencies and have increased the use of the internet to promote vacancies [16; 17].

In Mexico, companies are not the only ones that have started an ongoing process of quality certification; public and private universities are also seeking national and international accreditations to guarantee their students' academic quality. These accreditations involve efforts on the part of universities to achieve established standards based on different variables that affect the measurement of academic quality. One of these variables is the verification of the fulfillment of exit competencies in graduates from the employers' perspective, called the assessment process. Characteristics of university graduates include that they must be multifaceted in generic abilities, flexible when faced with the diversification of the world job market, prepared to compete in the international labor market, creative, and innovative [18]. Professional graduates are also expected to have a positive attitude toward starting their own businesses, be interested in lifelong learning, be capable of teamwork, and have general knowledge and skills. Likewise, in addition to the knowledge and experience derived from the work itself, graduates need to know how to continue learning by themselves [19].

## II. METHODOLOGY

This research was performed from an exploratory and descriptive perspective to determine the recruitment practices of Mexican companies as well as to perform a comparative analysis of the exit competencies of Mexican university students and employers' satisfaction with them. A qualitative methodology was implemented in the exploratory phase, and 23 in-depth interviews were conducted with directors of medium-sized and large companies in different industries in order to identify the factors that employers consider for the recruitment of recent graduates with professional skills, the competencies they value in those graduates, and what the recruitment and selection process is. Once the factors and competencies were identified, a

quantitative phase was implemented. To ensure that the respondents were referring to the profile of recent graduates in professional fields, we asked them to answer the questionnaire while considering employees with fewer than 5 years in an executive position. To achieve the research objectives, we interviewed not only human resource (HR) directors, but also the immediate supervisor of those hired as well—namely, the area director (AD), who knows the employees better because they work with them daily. Of the 23 total interviews, 13 were with HR directors and ten with ADs in four cities of the Mexican Republic: Mexico City, Guadalajara, Monterrey, and Chihuahua. The interviews were conducted in large companies (i.e., at least 100 employees) in the service and manufacturing industries.

Based on the qualitative findings, specific competencies were added to the questionnaire to be measured with the interviewees. In this type of study, the sampling frame is difficult to build, so a non-probability mixed sampling method was used. We employed a judgment sampling to guarantee the inclusion of the companies most representative in the hiring of professionals in the country as well as a quota sampling to achieve dispersion in the sectors and areas in which organizations commonly hire professionals. The final sample was formed by 581 companies distributed in six places: Mexico, Monterrey, Guadalajara, Chihuahua, Puebla, and Queretaro. One hundred sixty-eight of the companies interviewed are on the list of the 500 largest companies according [20]. Two questionnaires were applied in each company: one for the HR director (512) and one for a specific AD (507), for a total of 1,019 persons interviewed in a face-to-face setting. The selection of the area to be interviewed was based on the core competence of the company; for example, in finance service companies, the finance AD was interviewed.

The questionnaire was designed based on the information gleaned during the exploratory phase in four areas: (1) variables related to company size, business activity, and volume of recruitment of professionals; (2) questions related to the hiring process, sources consulted, and the evaluation methods of candidates; (3) questions related to the hiring decision factors and the evaluation of competencies; and (4) characteristics of the directors' profile.

The sample was formed by ADs and HR directors who were an average of 38 and 39 years old, respectively. Women predominate as HR directors (68%), with only 32% being men. As for the ADs, only 25% were female and 75% were men. The average time working in that position and in the company as well as the vocational training of those interviewed is presented in Table 2.

Forty-two percent of the interviewed companies have between 100 and 500 employees. Directors in five areas were interviewed, with the following distribution of directors per area: operations, production, and logistics (31%); administration and finance (22%); commercialization, sales, and marketing (23%); information technology and systems (11%); and communication, journalism, and international relations (6%).

#### III. RESULTS

## How do companies hire professionals?

From the in-depth interviews, seven stages of the hiring process were identified: (1) vacancy generation, (2) profile definition, (3) candidate search, (4) evaluation, (5) selection and recruitment, (6) hiring, and (7) performance evaluation (see Fig.2).

These stages were validated in the quantitative study, which measured the involvement level in each stage of the process on a scale from 1 to 10, where 10 was highly involved in the process and 1 was not involved. Once the response averages of the ADs' and HR directors' involvement level were determined, an analysis of variance was performed to identify significant differences between the averages. The results confirmed that HR directors search for candidates and evaluate their profile whereas ADs assess technical competence and choose who they will hire (see Fig. 3). No significant statistical difference was identified in evaluating the matching of candidates to the job profile, suggesting that both directors have equal responsibility in the evaluation of candidates (stage 4) in this respect.

The penetration of full-time professionals hired in the companies is 40% for the overall organization and 73% for the specific areas studied. According to the RH directors and ADs interviewed, this rate increased in the two years before the questionnaire was administered, which is consistent with the trend of professionalization in the Mexican job market, as described in previous sections.

In the second stage of the recruitment process, the search for candidates, it was identified that a company uses on average 6.10 different media as sources of recruitment for university graduates. The importance of universities' labor exchanges, commercial labor exchanges, internal recommendations, and professional practices is clear in preference to other means. The internet dominates as a means of delivery, displacing printed media and specialized head-hunting agencies (see Fig.4). The commonly consulted work exchanges on the internet include OCCmundial.com (65%), Compu Trabajo (12.5%), Bumeran (9.6%), and others (12.9%). In the third stage of the process, the evaluation of candidates, most of the companies used the

examination of knowledge and psychometric tests to assess the candidates. The evaluation by competencies stands out as a tool that 6 of every 10 employers use as one of 7 different tools for assessing candidates.

The review of the labor market characteristics in Mexico indicated that a highly competitive market exists for university students; thus, this study aimed to identify the hiring funnel. This funnel was designed based on the number of curricula vitae companies receive in response to a vacancy; of those curricula, we asked for the number of people who scheduled an interview with HR staff and, finally, of the people interviewed, how many got to interview with the director or head of the department/area with the vacancy. Fig. 5 shows the information through the figure of funnels; résumés received per vacancy are shown in the widest part of the funnel, the middle shows the individuals selected for an interview in HR, and the narrowest part shows the average number of individuals who interviewed with the AD.

As can be seen, in the large cities (Mexico, Monterrey, Guadalajara), between 3% and 5% of applicants ultimately landed the final interview; in the smaller cities (Chihuahua, Puebla, Querétaro), this rate ranged between 5% and 7%. The competition is definitely greater in large cities, where up to 200 candidates regularly apply for a position, and in medium-sized cities, where between 50 and 90 candidates regularly apply.

The turnover rate that companies have of professionals they hire was identified as a complement to this information. According to HR managers' perceptions, the probability of a college graduate leaving the organization in the first year is between 3% and 21%. Graduates of private universities have a turnover rate that is significantly greater in comparison to the graduates of public universities.

#### Main exit competencies sought in professionals.

Recruiters can improve the recruitment and selection process by being more efficient in the media chosen to find candidates, in the assessment methods used, or by using alternative sources for the talent search; however, clearly defined competencies are required in order to be able to filter candidates. The definition of competencies was established based on a review of literature and supplemented by findings from the qualitative phase of this study. A list of 19 competencies was obtained, each one evaluated only by ADs who work closely with hired university graduates in order to identify the strength of each of the competencies. A scale ranging from 1 to 10, which is widely used in schools for the evaluation of tests, was used; 10 represented that university graduates perform excellently in the competency in question whereas 1 was the total absence of competency. Fig.6 presents the average qualification of each of the skills.

The three competencies with higher evaluation were the ability to act in an ethical manner (8.43), self-confidence (8.26), and the ability to interact (8.10); those with the lowest evaluation (i.e., most lacking in professionals) were international experience (6.43), professional practices or previous experience (7.08), and a willingness to carry out operational jobs (7.63). A review of the value of the standard deviation for each of the competencies showed that the highest values were obtained by three competencies: international experience/study abroad, willingness to carry out operational jobs, and experience or internship. Thus, we concluded that these three competences show greater variability, indicating that ADs have a heterogeneous perception about the presence of these competences in recent graduates. Some professionals have more international experience, are more willing to carry out operational jobs, and have previous experience whereas others do not.

In addition, we asked the ADs to rank the competencies based on the importance that the company assigns to each of the competencies. Based on this hierarchy and taking into account the evaluation of the strength of the competency in the university graduates working in the organization, a gap or matching analysis was performed. The results are presented in Fig.7.

Following the spirit of a study about company satisfaction [21], we present in Fig. 7 the assessment of each competency in the abscissa and the degree of importance of the competency as a hiring factor in the ordinate; both variables were standardized to facilitate comparison. In addition, a 45° line is included; if a competency falls within this line, it means that the evaluation is equal to the importance of competency as a factor in hiring and, therefore, the gap is zero (i.e., complete matching is achieved). In the upper right quadrant, where both evaluations are positive, if the competency is located above the line, it means that there is a gap (importance > evaluation); in the lower left quadrant, where they are negative if competence is to the left of the line, it means that its priority as a hiring factor is lower than the evaluation of competency. In both cases, no matching is detected.

Twelve competencies are identified as more important than the average, and nine are less important. Of the important ones, four stand out: teamwork, leadership, entrepreneurship, and communication. Although they are important, the assessment is apparently regular, as it shows a standardized assessment of around zero on the axis of competency, which means that as competencies they are perceived as average. The competencies with a higher evaluation, such as ethical behavior and self-confidence, have an intermediate importance. Competencies with lower-than-average performance, such as studies abroad and professional experiences, are, in the opinion of the directors, of minor importance as a factor in hiring.

In summary, we can highlight that (a) there is a positive gap (importance > evaluation) in the attributes that the companies consider most important, like teamwork, proactivity, leadership, entrepreneurship, communication, and search and analysis of information; (b) in the attributes that have less importance (as a hiring factor) to the company, such as studies abroad and civic responsibility, the gaps are negative (evaluation > importance).

At first glance, the sample suggests that universities fall short of the skills companies seek and instead produce skills that are not important for employers. However, a more detailed analysis helps us understand that the lack of matching in the most important attributes as recruitment factors does not necessarily imply that the skills are low; indeed, those are the ones that have a better assessment, but that businesses require more. However the presence of skills not valued by the companies can be explained by two issues. First, education does not exclusively aim to satisfy companies, but rather serve to help individuals mature and develop skills useful to society. Second, the importance might be highly biased toward the operational job of individuals by their current boss and the required competencies. However, in the long term the desired mix of competences might change, making these more critical; for example speaking and writing in English and understanding foreign cultures might not improve the operation of the current job, but they are indispensable when the individual moves to executive positions.

In addition, with the goal of defining the structure of the assessed competencies, an exploratory factor analysis of the 19 competencies was developed. A model explaining 55.8% of the total variance in the assessment of competencies is represented by two dimensions: 11 of the 19 variables were in the first dimension, and in the second dimension included 8 variables, as shown in Fig. 8.

We called the first dimension individual skills because it is formed by variables that reflect professionals' skills, such as the dominion of English language, studies abroad/international experience, selfconfidence, leadership, entrepreneurship and innovation, global perspective, oral and written communication, the ability to search for and analyze information, participation in extracurricular activities, the knowledge of one's professional career, and internship experience. Eight competencies were grouped in a second dimension called skills relative to the environment, because they are more concerned with the individuals' interactions with teams and society; civic responsibility, readiness to perform operational work, teamwork, ability to act in an ethical manner, work under pressure, commitment to sustainable development, proactivity, and ability to interact. Extending the analysis to the major universities in Mexico, Figure 9 presents a positioning map of the satisfaction in the individual and related with the environment factors. Some interesting insights are derived from the map: (1) no university scores high in both skills (i.e., only two schools reside in quadrant II, although they do not have the highest scores in both dimensions); (2) the universities with the highest scores in individual skills, which are mostly private, fail to achieve the interaction with the environment skill; (3) there is a group of players with high scores in the related with the environment skills, including the three large public universities, but they have low achievement in the individual skills (i.e., quadrant I). Apparently, in addition to the absence of the fit or matching between importance and satisfaction with competences, the perceptual map provides a picture where universities are located in both extremes, leaving plenty of space to look forward to a repositioning strategy and moving to the north of quadrant II.

### IV. CONCLUSIONS

Matching between university graduates' competences and organizations' needs is critical in a job market, especially in a country moving very fast in the professionalization of its labor force. Hence, universities make efforts to design their curricula according to what skills business and organizations require. This paper described the recruitment process that organizations actually employ in Mexico in order to achieve the matching of talent and assess the degree of matching between college students' competences and satisfaction of firms in Mexico from the perspective of HR and ADs.

We found that the search for candidates is rapidly moving toward the internet and university graduates' competition for jobs is becoming rather intense. Indeed, only 3% to 5% of the initially considered candidates were called in for a final interview with the AD in the three main cities of the country, where each job attracted between 50 and 200 applicants, depending on the city.

In addition, 19 competencies were identified, and no clear matching between what universities deliver and organizations need has been found. Actually, there are deficits (evaluation < importance) in the attributes that the companies consider to be more important when hiring, such as teamwork, proactivity, leadership, entrepreneurship, communication, and search and analysis of information. Moreover, companies apparently do not value those attributes less directly related to operations, such as experiences of foreign exchange and civic responsibility.

This research must be taken as a preliminary approach to this issue. Future waves of this survey should contemplate using a probabilistic sampling with probabilities proportional to firms' sizes; we could not advance in this methodological aspect. Likewise, an analysis of the assessment of the competencies was carried out in a

general way so that future research might study matching by disciplines in order to develop more ad-hoc measures to improve the matching. Finally, because of the dynamism of the market conditions in which companies operate, a longitudinal study is suggested to monitor competencies studied over time.

#### REFERENCES

- [1]. Lazear, Edward P, Raids and Offer Matching, Research in Labor Economics, 1986, 8: 141-165.
- [2]. Hayes, Rachel M., Paul Oyer, and Scott Schaefer, Co-Worker Complementarity and the Stability of Top Management Teams. Journal of Law, Economics, and Organizations, 2006, 22: 184–212.
- [3]. Woodcock, Simon D., Match Effects, Working paper, Simon Fraser University, Burnaby, BC, Canada, 2008.
- [4]. Andersson, Fredrik, Matthew Freedman, John C. Haltiwanger, Julia Lane, and Kathryn Shaw, Reaching for the Stars: Who Pays for Talent in Innovative Industries? *Economic Journal*, 2009, 119: 308-332.
- [5]. Hodges, Dave., Burchell, Noel, Business Graduate Competencies: Employers' Views on Importance and Performance. *Asia-Pacific Journal of Cooperative Education*, 4(2), 2003, 16-22.
- [6]. Raybould, Joanne., Sheedy, Victoria, Industrial and Commercial Training. Emerald Group Publishing Limited, ISSN 0019-7858.Vol. 37 NO. 5 2005, pp. 259-263.
- [7]. Ai Hwa Quek, "Learning for the workplace: a case study in graduate employees' generic competencies". *Journal of Workplace Learning*.Vol. 17 Iss: 4, 2005, pp.231 242.
- [8]. Hesketh, Anthony J., Recruiting an Elite? Employers' perceptions of graduate education and training. *Journal of Education and Work*. Taylor & Francis Ltd. ISSN 1363-9080, Vol. 13, No. 3, 2005.
- [9]. Branine, Mohamed, A study of the recent changes in methods and expectations. Career Development International. Emerald Group Publishing Limited, Vol. 13 No. 6, 2008, pp. 497-513.
- [10]. ANUIES 2012, http://www.anuies.mx (Recuperado en enero de 2013).
- [11]. ANUIES 2011. Anuario Estadístico de Educación Superior. Asociación Nacional de Universidades e Instituciones de Educación Superior. <a href="https://www.anuies.mx">www.anuies.mx</a> (Recuperado en octubre de 2011).
- [12]. Martínez, N. Prevén mayor matrícula de mujeres en universidades, El Universal.com.mx, 8 de Marzo, 2011.
- [13]. Daspro, Elieen, An Analysis of US Multinationals' Recruitment Practices in Mexico. *Journal of Business Ethics*, 2008, 87: 221-232.
- [14]. Herriot, P. (Ed.) Handbook of Assesment in Organizations, Chichester: Wiley, 1989.
- [15]. Sackett, P.R. & Lievens, F. Personnel selection. Annual Review of Psychology, 2008, 59: 419-450.
- [16]. Capelli, P. Making the most of online recruiting. Harvard Business Review. March, 2001. pp. 139-46.
- [17]. Beardwell, I., Holden, L. and Claydon, T. Human Resource Management, 4th ed., Prentice Hall, Harlow, 2004.
- [18]. Alejo, S. J., Ruíz, G. M. & Martí, M. Universidad, Matrícula y Tendencias Profesionales en México. *Acta Universitaria*, 2007, 17, n°. 2: 19-27.
- [19]. Valle, A. La calificación profesional en el nuevo escenario de la organización del trabajo. En Valle A. (Coordinador), Las profesiones en México frente al mercado de trabajo, 2004, 14-46. México: CESU. UNAM.
- [20]. Expansión 2009. Las 500 empresas más importantes de México 2009. www.cnnexpansion.com/ Recuperado en octubre de 2011.
- [21]. Marzo, M.; Pedraja, M. & Rivera, P. Determinants of the satisfaction of firms with the competencies of university students: a Spanish case study. *International Journal of Training and Development*, 12, no.4, 2008: 282-292.

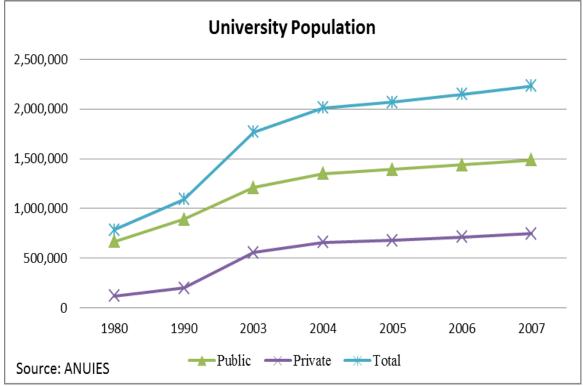


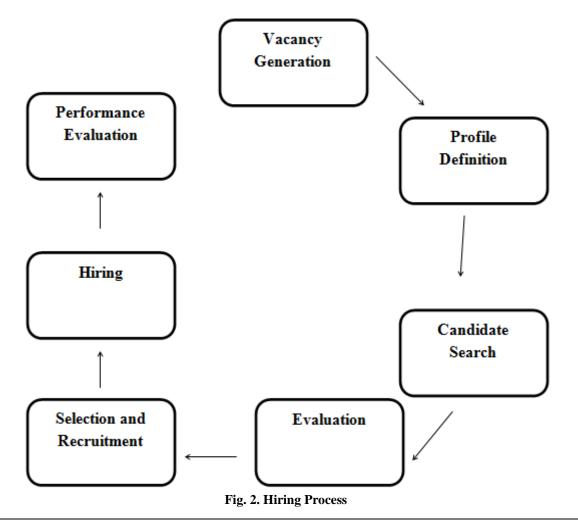
Fig. 1. University population in México

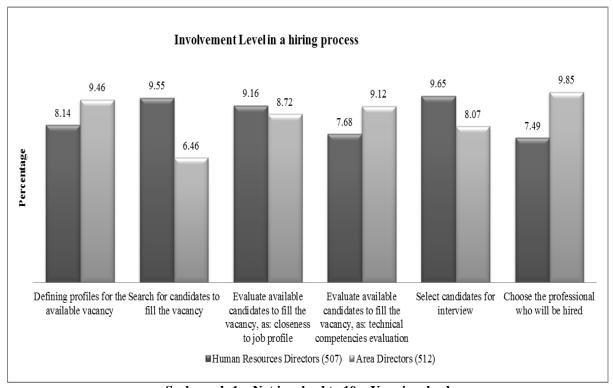
Table 1. Economical Active Population according to scholar grade

			Relative weight		Average annual growth
	2005	2011	2005	2011	2005-2011
Elementary or less	25,064,265	23,576,927	37.8%	31.1%	-1.0%
Junior High	19,149,512	23,444,769	28.9%	31.0%	3.4%
High Scholl	13,772,047	17,587,636	20.8%	23.2%	4.2%
Undergraduate	7,760,755	10,375,784	11.7%	13.7%	5.0%
Graduate	473,469	714,182	0.7%	0.9%	7.1%
Total	66,220,048	75,699,298	100.0 %	100.0%	2.3%

**Table 2. Sample Profile** 

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Companies	Area	Companies			
Number of employees	11*	200*			
% of professional graduates	73%	40%			
<b>Participants</b>	Area Directors	<b>Human Resources Directors</b>			
Years working at the company	8.3	5 years			
Years working in the area	5	3.5			
Age	37.5	39			
Gender	75% male	32% male			
	25% female	68% female			
Education Level	55% bachelor degree	76% bachelor degree			
	42% master	26% master			





Scale used: 1 = Not involved to 10 = Very involved Fig. 3. Human Resources and Area Directors Involvement level

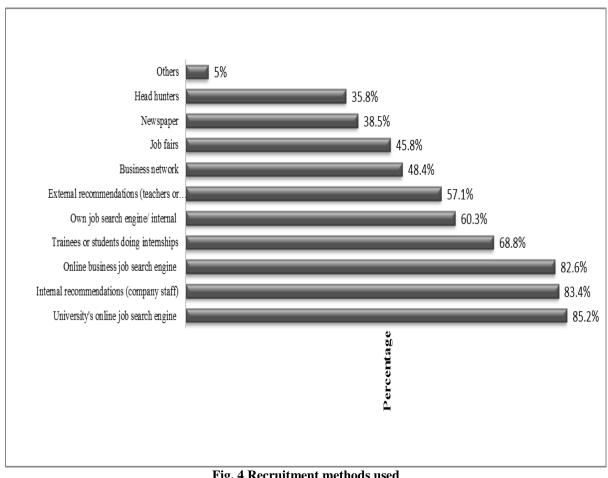


Fig. 4 Recruitment methods used

## CV received after a vacancy publication

## Interviewed candidates with HR area

## Interviewed candidates with Area Director owner of the vacancy position

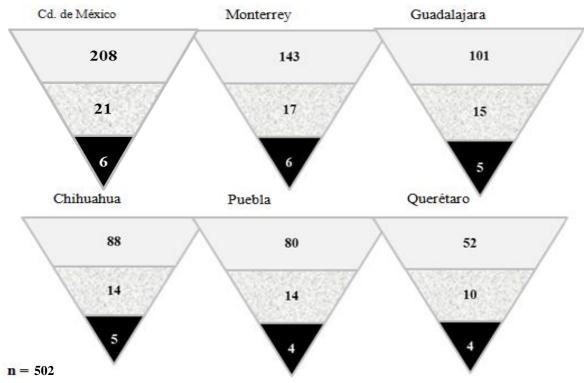


Fig. 5. Resumes Funnel

	Satisfaction	
Competences	Mean	Std Deviation
1. Experience / Professional Practice / Participation in "internship" company	7.08	2.11
2. Expertise of his career	7.97	1.55
3. English proficiency	7.58	2.23
4. International experience	6.43	2.87
5. Teamwork	7.81	1.80
6. Participation in extracurricular activities (sports, cultural, etc.)	7.59	1.94
7. Ability to search and analyze information	7.95	1.61
8. Oral and written communication	7.81	1.63
9. Ability to interact	8.10	1.50
10. Self-confidence	8.26	1.52
11. Leadership	7.80	1.67
12. Innovation and entrepreneurship	7.84	1.68
13. Global perspective	7.84	1.75
14. Ability to act in an ethical manner	8.43	1.49
15. Citizenship	7.93	1.56
16. Commitment to sustainable development	7.73	1.67
17. Proactivity	8.03	1.59
18. Working under pressure	8.03	1.68
19. Willingness to carry out operational jobs	7.63	2.17

Scale: 1= Performs poor in the competency 10=Performs excellent in the competency Fig. 6. Evaluation of the competencies

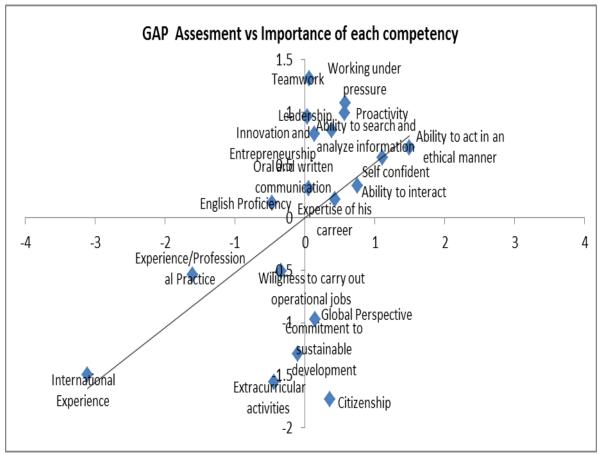


Fig. 7. Gap Analysis

Evaluated Competence	Factor	
	1	2
English proficiency	0.844	0.014
International experiencece	0.79	-0.023
Self-confidence	0.754	0.254
Leadership	0.718	0.404
Innovation and entrepreneurship	0.689	0.421
Global perspective	0.681	0.415
Oral and written communication	0.675	0.39
Ability to search and analyze information	0.615	0.469
Participation in extracurricular activities (sports, cultural,	0.559	0.291
etc.)		
Expertise of his career	0.499	0.439
Experience / Professional Practice / Participation in	0.441	0.384
"internship" company		
Citizenship	0.173	0.723
Willingness to carry out operational jobs	-0.412	0.705
Teamwork	0.278	0.665
Ability to act in an ethical manner	0.246	0.663
Working under pressure	0.273	0.66
Commitment to sustainable development	0.356	0.594
Proactivity	0.533	0.58
Ability to interact	0.434	0.49

Fig. 8. Exploratory Factor Analysis

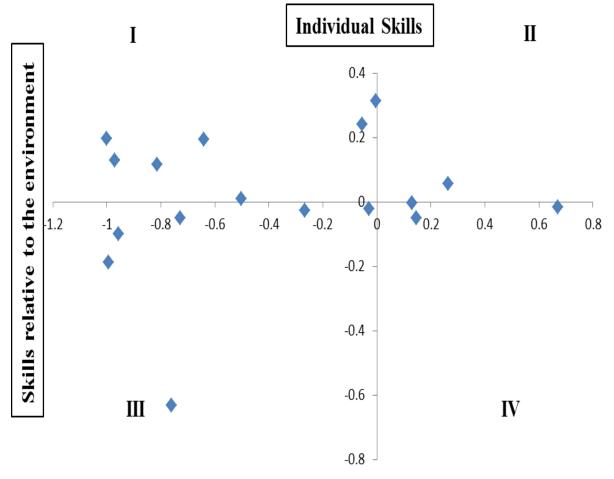


Fig. 9. Perceptual Map