

A Gap Analysis: Between Employers' Perception and Experience of Graduates in Pharmaceutical Industry



Management

KEYWORDS : Perception, attributes, Workplace Skills, Gap Analysis, Basic Skills

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ABSTRACT

The main objective of the study is to analysis the gap between the employers' perception and experience of graduates in pharmaceutical industry. The survey is based on sampling; sample size is being fixed in order to collect accurate information within minimum time. Convenience sampling is being use to make the task easy. The gap is being analyzed on the basis of different attributes such as basic skills, knowledge, workplace skill and accessing quality. Employers were accessed on the basis of same attributes. The sampling is used so that the employers of pharmaceutical industry in Vapi, Daman, and Dadra Nagar haveli, would response and give answer of the entire questions.

Introduction

The main objective of the study is to analysis the gap between the employers' perception and experience of graduates in pharmaceutical industry. The survey is based on sampling; sample size is being fixed in order to collect accurate information within minimum time. Convenience sampling is being use to make the task easy. The gap is being analyzed on the basis of different attributes such as basic skills, knowledge, workplace skill and accessing quality. Employers were accessed on the basis of same attributes. The sampling is used so that the employers of pharmaceutical industry in Vapi, Daman, and Dadra nagar haveli, would response and give answer of the entire questions. Data was analyzed and interpreted with the graphical tools, charts, percentage method and statistical tools such as Paired sample T test and percentile method using SPSS. After analyzing and interpretation of the data, it has being found that there is lots of gap between the employers' perception and experience of graduates in pharmaceutical industry. The gap was found on the basis of the different attributes such as basic skill, work place skill, knowledge and intellectual ability and accessing attributes. Overall the maximum gap exists among the attributes such as culture, improvement among the graduates, practical ability, ability to understand the actual problem and solving the problem. So this concludes that students need a focus more on the practical intelligence in different situations. Also we can conclude that institutes and the colleges should focus more on the practical exposure for the students. Colleges should have different session for grooming the students to tackle the problem in the industry.

REVIEW OF LITERATURE

Azami Zahrim(2008), discusses a comprehensive study of employers' perception and expectation of Malaysian engineering graduates towards assessing measurable qualities. To have better overview in this issue, a survey on the needs, perception and expectation of Malaysian industries towards graduate engineers is conducted.1

Susima Weligamage and Sununta Siengthai(2003)² conducted with the objectives of identifying university graduates' job expectations, factors affecting their job expectations and identifying employers' needs from university graduates. The study attempts to find the nature of the gap between employers' expectations of skills and job expectations of graduates from Sri Lankan universities to make recommendations for stakeholders of the problem.

Vathsala Wickramasinghe and Lasantha Perera,conducted study is to explore employability skills that employers, university lecturers and graduates value to bring to the workplace, when graduates are applying for entry-level graduate jobs in the field of computer science in Sri Lanka.3

Rahamah Ismail, Ishak yussof and lai wei sieng⁴ conducted study is to get the perception of employers' in services sector on graduates performance. Services sector is selected since, it has become the main sector in the country. A total of 749 employers' in the services sector in Lembah Klang involved in this research. The questionnaires were distributed to employers' and human resource managers and head of other departments in the organization in 2009 and 2010. The difference in mean score obtained by graduates from the University Kebangsaan Malaysia (UKM), graduates from other local institute of higher education and graduates from overseas were compared and tested. In general, the results show that respondents give moderate scores to all of the graduates. This shows that the graduates performances are good and satisfying but not the best. In addition, some weaknesses among graduates from UKM and other local and overseas institute of higher education have been recognized from the results of comparing the mean scores. The implication from this finding is that institutes of higher education still need to work hard to improve the ability and employability of their graduates in the job market where quality is more needed than quantity.

RESEARCH DESIGN

The study aimed to know the opinion of the Top Management, HR Managers and HR Executives of the pharmaceutical companies located in Asia's largest industrial Area GIDC Vapi, Daman and Dadra Nagar Haveli. Hence, the research design of the study is descriptive in nature. The researcher focused on a comprehensive set of workplace attributes that influence Pharma graduates willingness and desire to achieve at work. The researcher identified these skills, knowledge and understanding to ensure that the questionnaire covered the broadest spectrum of tangible and intangible aspects of the work environment. As a result, the questionnaire included items about the full range of the level of gap exists between the employers' perception and real experience with the (A) Basic Skill and Understanding (B) Knowledge and Intellectual Ability and (C) Workplace skills and applied knowledge. The study was conducted in Asia's largest Industrial area GIDC Vapi and UT of Dadra Nagar and Haveli confined to individual managers of the pharmaceuticals companies only.

SAMPLING

The respondents were selected from entire industrial area of GIDC Vapi and UT of Daman and Dadra Nagar Haveli (the universe) who was in the manufacturing of various Pharma products. The selected sample is comprised of different areas of the universe. Important among them were Sarigam, Vapi, and Atul, Daman, Dadra Nagar Haveli. The selection of respondents was based on convenient sampling. Proper care had been taken so that the selected sample come from the different geographical area of the universe and hence represent the main activities carried out by them in the universe.

OBJECTIVES

- To identify the GAP between the employers' perception and real experience with reference to Basic Skill and Understanding of the Pharma graduates
- To find out the GAP between the employers' perception and real experience with reference to Knowledge and Intellectual Ability of the Pharma graduates
- To know the GAP between the employers' perception and real experience with reference to Workplace skills and applied knowledge

HYPOTHESIS

The following hypothesis were formulated for the purpose of the study

H0a :There is no significant difference between perception of the employers and real experience with reference to the basic skill and understanding

H1a : There is significant difference between perception of the employers and real experience with reference to the basic skill and understanding

H0b: There is no significant difference between perception level of the employers and real experience with reference to the knowledge and intellectual ability

H1b : There is significant difference between perception level of the employers and real experience with reference to the knowledge and intellectual ability

H0c: There is no significant difference between perception level of the employers and real experience with reference to workplace skills and applied knowledge

H1c : There is significant difference between perception level of the employers and real experience with reference to workplace skills and applied knowledge

SOURCES OF DATA COLLECTION

The primary data had been collected from the respondents through structured questionnaire and wherever it is appropriate personal interview was conducted. The secondary data for the present study had been gathered from various journals, research papers, newsletters, books and HR websites.

TOOLS OF DATA ANALYSIS

The paired sample T Test and Percentile had been used on the collected data and analysis of the same had been done through SPSS Software to draw meaningful conclusions. After completing the field work the collected information was edited and tabulated. The conclusions were drawn on the basis of data collected, collated and summarized. The interpretation is based on those findings from the analysis and informal talks with Top management, HR Managers and Executives.

SIGNIFICANCE OF THE STUDY

The study results will be of a great help to the HR Managers and employees of the segments and various organizations in the Pharma segment. It will also be useful to the industry associations located in the respective region and the placement consultants. It will also be useful to the HR Practitioner and students of Pharma Branch.

FURTHER RESEARCH AVENUES

The Pharma industry has to compete now more keenly with other industry whose reliance on the talented employee. This is the challenge before the segments where efficiency, merit and performance would count for their organizational excellence.

Secondly, the vast majority of HR professionals believe that HR serves as a partner and has partial or shared responsibility in managing change and cultural transformation in organizations. Thirdly, managing talent and improving leadership development are the most critical HR challenges facing organizations today and projected for the future.

From the above discussion, it can be concluded that there is a huge scope for the research work in the various areas of talent management in the Pharma Industry

DATA ANALYSIS

DATA ANALYSIS AND INTERPRETATION

Data collected through the questionnaire was analyzed with the help of SPSS and the results were as follows:

In this study, the gap analysis of all the companies in Vapi, Daman and Dadra nagar haveli toward graduate work force is also discussed. The measure of the degree of deficiency in achievement for each attribute is defined as the average difference between the perception and experience for all respondent i.e.

$$\text{Mean Gap} = \sum \left[\frac{(\text{Perception} - \text{Experience})}{N} \right] [100]$$

A higher mean gap value depicts a bigger discrepancy between what is expected of the work force and their performance as perceived by employers. The attributes which show worst score is highest mean gap and the best score is the lowest mean gap.

Table No: 1 Distribution of Sample Respondents According to Designation

Designation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Managing Director	11	7.3	7.3	7.3
	HR Manager	78	52.0	52.0	59.3
	HR Executives	61	40.7	40.7	100.0
	Total	150	100.0	100.0	

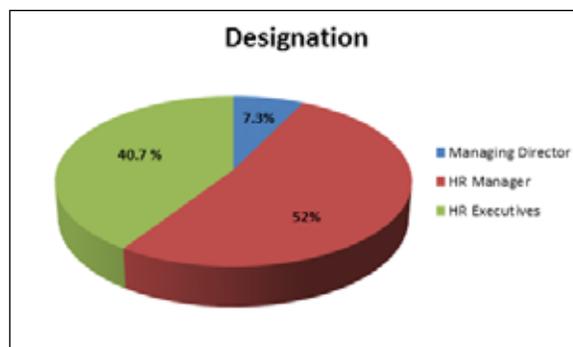


Figure No:1 Distribution of Sample Respondents According to Designation

INTERPRETATION:

Table 1 and figure 1 shows the numbers of General Manager, HR manager and HR executive within the pharmaceutical companies in Vapi, Daman and Dadra nagar haveli. Data collection was carried out through face to face interviews using a set of questionnaires. As to ensure that the data collected is accurate as possible, the interviews were conducted with General Manager, HR manager and HR executive of higher rank within the company hierarchies.

A) BASIC SKILLS AND UNDERSTANDING**Table No: 4 Statistical Significance of Mean Gap between Employers Perception and Real Experience on Basic Skills and Understanding of the Pharma Graduates**

Paired Samples Test		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	prior exposure to the work environment - prior exposure to the work environment	2.233	.993	.081	2.073	2.393	27.554	149	.000
Pair 2	knowing the organization - knowing the organization	1.913	1.049	.086	1.744	2.083	22.345	149	.000
Pair 3	ability to find and access information - ability to find and access information	1.920	1.027	.084	1.754	2.086	22.905	149	.000
Pair 4	ability to use new information - ability to use new information	2.700	1.079	.088	2.526	2.874	30.645	149	.000
Pair 5	ability to handle large amount of information - ability to handle large amount of information	1.873	.869	.071	1.733	2.014	26.394	149	.000
Pair 6	proficiency in English - proficiency in English	.233	1.512	.123	-.011	.477	1.889	149	.061
Pair 7	oral presentation skill - oral presentation skill	.480	1.208	.099	.285	.675	4.866	149	.000
Pair 8	written communication skill - written communication skill	2.653	1.087	.089	2.478	2.829	29.902	149	.000
Pair 9	numeracy or quantitative literacy - numeracy or quantitative literacy	.347	.567	.046	.255	.438	7.483	149	.000
Pair 10	computer literacy - computer literacy	.167	.391	.032	.104	.230	5.214	149	.000
Pair 11	technical ability - technical ability	3.107	.963	.079	2.951	3.262	39.494	149	.000
Pair 12	ability to use information technology - ability to use information technology	2.800	1.087	.089	2.625	2.975	31.553	149	.000

The above table (Table-2) shows that the sig. (2-tailed) value at 95% level of significance is 0.000 which is less than .05, so the null hypothesis is rejected i.e. there is significant difference between the level of Employers perception and level of real experience. From the above table it is being indicated that the sig. (2-tailed) value at 95% level of significance is 0.61 for Proficiency in English, which is less than .05, so the null hypothesis is for

Proficiency in English is accepted i.e. there is no significant difference between the level of Employers perception and level of real experience.

Thus, we can conclude that there exist gap between the experience and perception level of employers with respect of basic knowledge and understanding except one attribute i.e Proficiency in English.

B) KNOWLEDGE AND INTELLECTUAL ABILITY**Table No: 7 Statistical Significance of Mean Gap between Employers Perception and Real Experience on Knowledge and Intellectual Ability of the Pharma Graduates**

Paired Samples Test		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	General knowledge about local and global affairs - General knowledge about local and global affairs	2.76000	1.03418	.08444	2.59314	2.92686	32.686	149	.000
Pair 2	subject or discipline knowledge - subject or discipline knowledge	1.70667	.90892	.07421	1.56002	1.85331	22.997	149	.000
Pair 3	understanding of core principal and processes - understanding of core principal and processes	1.93333	1.05338	.08601	1.76338	2.10329	22.478	149	.000
Pair 4	enquiry and research skills - enquiry and research skills	2.92000	1.03962	.08488	2.75227	3.08773	34.400	149	.000
Pair 5	interest in ideas and desire to continue learning - interest in ideas and desire to continue learning	1.71333	1.09506	.08941	1.53666	1.89001	19.162	149	.000

Pair 6	intellectual flexibility and adaptability - intellectual flexibility and adaptability	2.96000	.81000	.06614	2.82931	3.09069	44.756	149	.000
Pair 7	understanding of economic and business realities - understanding of economic and business realities	2.04667	.75384	.06155	1.92504	2.16829	33.252	149	.000
Pair 8	ability to summarize key issues - ability to summarize key issues	2.82667	.91773	.07493	2.67860	2.97473	37.723	149	.000
Pair 9	ability to relate a specific issue to the broader whole - ability to relate a specific issue to the broader whole	1.60667	1.11064	.09068	1.42748	1.78586	17.717	149	.000
Pair 10	critical and analytical ability - critical and analytical ability	2.73333	.96702	.07896	2.57731	2.88935	34.618	149	.000
Pair 11	ability to formulate and check hypotheses and assumptions - ability to formulate and check hypotheses and assumptions	2.69333	.96896	.07912	2.53700	2.84967	34.043	149	.000
Pair 12	ability to follow and construct logical argument - ability to follow and construct logical argument	2.64667	.96333	.07866	2.49124	2.80209	33.649	149	.000
Pair 13	rapid conceptualization of issues - rapid conceptualization of issues	2.23200	1.19229	.10664	2.02093	2.44307	20.930	124	.000

The above table (Table-4) shows that the sig. (2-tailed) value at 95% level of significance is 0.000 which is less than .05, so the null hypothesis is rejected i.e. there is significant difference between the level of Employers perception and level of real experience.

Thus, we can conclude that there exist gap between the experience and perception level of employers with respect to Knowledge and Intellectual Ability

C) WORK PLACE SKILLS AND APPLIED KNOWLEDGE

Table No: 10 Statistical Significance of Mean Gap between Employers Perception and Real Experience on Work place skill and applied knowledge of the Pharma Graduates.

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ability to apply knowledge to new situations - ability to apply knowledge to new situations	1.393	1.679	.137	1.123	1.664			
Pair 2	ability to recognize a problem situation - ability to recognize a problem situation	1.767	1.266	.103	1.562	1.971	17.090	149	.000
Pair 3	ability to choose appropriate information to address problem - ability to choose appropriate information to address problem	1.760	1.335	.109	1.545	1.975	16.152	149	.000
Pair 4	an appropriate approach to problem solving - an appropriate approach to problem solving	1.887	1.436	.117	1.655	2.118	16.096	149	.000
Pair 5	ability to plan and execute task independently - ability to plan and execute task independently	1.713	1.358	.111	1.494	1.932	15.455	149	.000
Pair 6	ability to relate specific issue to wider organizational context - ability to relate specific issue to wider organizational context	1.880	1.414	.115	1.652	2.108	16.286	149	.000
Pair 7	ability to monitor and evaluate own work-related action - ability to monitor and evaluate own work-related action	1.907	1.239	.101	1.707	2.107	18.849	149	.000
Pair 8	ability to devise ways to improve on own actions - ability to devise ways to improve on own actions	2.000	1.400	.114	1.774	2.226	17.498	149	.000
Pair 9	ability to deal with different cultural practices - ability to deal with different cultural practices	1.993	1.435	.117	1.762	2.225	17.008	149	.000
Pair 10	understanding of changing workplace practices - understanding of changing workplace practices	-.793	1.623	.133	-1.055	-.531	-5.986	149	.000

The above table (Table-6) shows that the sig. (2-tailed) value at 95% level of significance is 0.000 which is less than .05, so the null hypothesis is rejected i.e. there is significant difference between the level of Employers perception and level of real experience.

Thus, we can conclude that there exist gap between the experience and perception level of employers with respect of workplace skills and applied knowledge.

FINDINGS

From the interpretation, It is being observed that worst score (highest mean gap) among basic skills and understanding is technical ability. This indicates that the employers are not satisfied with the performance of graduates in context with technical abilities.

Technical abilities are believed to be the essence of effective graduates. There exist gap between the experience and perception level of employers with respect of basic knowledge and understanding

It is being observed that Employers Perception and Real Experience on Knowledge and Intellectual Ability mean experience scores are less than the perception scores which indicate a gap exist. It is being observed that worst score (highest mean gap) among Knowledge and intellectual ability is Intellectual flexibility and adaptability and enquiry and research skill. This indicates that the employers are not satisfied with the performance of graduates in context with Intellectual flexibility and adaptability.

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- The study showed that in respect of among ten items in the of Employers Perception and Real Experience on Workplace skills and applied experience scores are less than the perception scores which indicate a gap exist. It is being observed that worst score (highest mean gap) among "Work place skills and knowledge" is ability to devise ways to improve on own actions and ability to deal with different cultural practices. This indicates that the employers are not satisfied with the performance of graduates in context with improvement and cultural aspects.

CONCLUSIONS AND SUGGESTIONS

- In overall, this study discussed the discrepancy between what is expected of the workforce and their performance as perceived by the employers on the basis of the 4 main attributes which has being further divided in many sub attributes. 150 personnel were accessed from the pharmaceutical industry within Vapi, Daman and Dadra nagra haveli.
- From the study conducted, it has being observed that technical ability, intellectual flexibility, research skill and different culture practices had the worst score (highest mean gap). The views of employers on graduates' ability clearly imply that it is important for graduates programs to improve in all area, particularly in several areas of work place and practical ability. There is also an agreement among all the General manager, HR manager and HR executive that local institution and the higher studies college graduates lack in the practical implication abilities and problem solving. In preparing the students for his/her professional career, more emphasis should be given to the industry and institute tie-ups so that the graduates should get the practical exposure from the real situation of the industry. Linkages between the industry experts and the college/institution may help the students to understand the requirement of the industry. Linkages will also help the faculties and the colleges/institution to decide upon that on which topic they should focus more while grooming the graduates.
- Institutions/Colleges should organize the industrial visits on frequent basis to make the students understand the theory implication at the practical workplace.
- From this study, even the student can get an idea that what the industry need from the graduates after the recruitment. So the graduates can prepare themselves according to the requirement of employers. From this study, even the industry expert can know about the quality level of the graduates in different situation. The experts can also revise the parameters of accessing the graduates, so that minimum gap would exist between the perception and the real experience of graduates.

REFERENCE

- Atkins, C.P. and R.L. Kent. 1988. What do recruiters consider important during the employment interview? *Journal of Employment Counselling* 25(3):98-103.
- Behrman, J.N. and R.I. Levin. 1984. Are business schools doing their job? *Harvard Business Review* 62:140-147.
- Drake, L.R., H.R. Kaplan, and R.A. Stone. 1972. How do employers value the interview? *Journal of College Placement* 32:47-51.
- Gilsdorf, J.W. 1986. Executives and academics perceptions on the need for instruction in written persuasion. *The Journal of Business Communication* 23(4):55-68.
- Hafer, J.C. and C.C. Hoth. 1981. Job selection attributes: Employer preferences vs. student perceptions. *Journal of College Placement* 41:54-57.
- Hakel, M.D. and A.J. Schuh. 1971. Job applicant attributes judged important across seven diverse occupations. *Personnel Psychology* 24:45-52.
- Hosmane, B., C. Maurath, and R. Manski. 2000. Quality of life: Statistical validation and analysis an example from a clinical trial. In *Handbook of Statistics: Bio-Environmental and Public Health Statistics*. (Eds.) C.R. Rao and P.K. Sen. Vol. 18. p.871-891.
- Houshyar, A. 1990. A solution to academia and practitioners concerns: How should industrial management be taught? *Industrial Management* 32(1):29-30.
- Kane, K.F. 1993. MBAs: A recruiter's view. *Business Horizons* 36:65-71.
- Kanungo, R.N. and S. Misra. 1992. Managerial Resourcefulness: A reconceptualization of management skills. *Human Relations* 45(12):1311-1333.
- Levenburg, N.M. 1996. General management skills: Do practitioners and academic faculty agree on their importance? *Journal of Education for Business* (Sept./Oct.):47-51.
- Livingston, J.S. 1971. Myth of the well-educated manager. *Harvard Business Review* 49:79-89.
- Maes, J.D., T.G. Weldy, and M.L. Icenogle. 1997. A managerial perspective: Oral communication competency is most important for business students in the workplace. *The Journal of Business Communication* 34 (1):67-79.
- Mandt, E.J. 1982. The failure of business education and what to do about it. *Management Review* 71:47-52.
- Martell, K. and S. Carroll. 1994. Stress the functional skills when hiring top managers. *HRMagazine* 39:85-87.
- McEwen, T. 1997. Communication training in corporate settings: Lessons and opportunities for the academe. *Mid-American Journal of Business* 12(1):49-58.
- McFadden, K.L., B. Jansen, and E.R. Towell. 1999. Building OM curriculum for the new millennium: Industry perceptions. *Mid-American Journal of Business* 14(2):37-45.
- Mueller, C.B. and C.S. Ma. 1999. Teaching computer software skills: Matching teaching and learning styles. *Mid-American Journal of Business* 14:59-67.
- Powell, G.N. and B.Z. Posner. 1983. Stereotyping by college recruiters. *Journal of College Placement* 44:63-65.
- Tschirgi, H.D. 1972. What do recruiters really look for in candidates? *Journal of College Placement* 33:75-79.
- Varnon, M.S. 1984. Computers and business education: Opportunity and responsibility. *Business Education Forum* 38:25-29.