

EXPLORING THE ASSOCIATION OF E- RECRUITMENT WITH ORGANIZATIONAL ATTRACTION AND MEDIATING ROLE OF COST EFFECTIVENESS & EASY TO USE.

Muhammad Hafeez¹, Umar Farooq²

Leads Business School, Lahore Leads University, Lahore Pakistan

Correspondent Phone Number: 00923324413597, 00923027849765

Correspondent Email: mhafeezsaim@yahoo.com

ABSTRACT: *The purpose of this study is to investigate the effectiveness of online recruitment system and its impact on organizational attraction.*

A sample comprising of 302 fresh graduate job seekers from the HEC recognized well known business schools from Lahore region was selected by using Proportional Stratified Sampling through questionnaire.

It is concluded that E- Recruitment has positive impact on organizational attraction. So, this study provides useful information for organizations to adopt E- Recruitment system to attract job seekers.

KEYWORDS: HRM, Recruitment, E- Recruitment, Cost Efficiencies, Easy to Use, Organizational Attraction.

1.0 INTRODUCTION

Human resource management is long term planning for achieving competitive advantages in which people are managed in such a way that added values can be obtained from people [1]. A heavy investment is required for Human resource management & new technology to get required results. A definition by Edwin B. Flippo (2008) is introduced in the field of Human resource management. They states that on basis of unique conditions of every employee, the abilities of the employee are developed in Human resource management. System of reward, motivation division of responsibilities, development of opportunities, adaptation of situation and understanding the working duties are also considered as fundamental elements [2].

Recruiting is the process of finding the potential candidates for the vacancies of organization. To achieve the recruiting goals the recruiting program should arrange such a way that this program attracts the qualified candidates [3]. Recruitment is the process of discovering the right applicants to an organization and this process pool of qualified applicants are attracted through various recruitment methods. Usually the methods used by organization are engaging executive search newspaper, employee referrals, contacting friends and others [4]. A general perception of recruitment is that for the process of selection an appropriate planning should be made by guesstimating the vacant posts. Recruitment assumes as searching and obtaining applications procedure for the jobs, so the right people can be selected among them. The present & future requirements of organization can be determined by recruitment, at the same time it increases the Pool of candidate at minimum cost. Recruitment also increases the successes of selection process, reduce the probability of turnover. Increase organizational and personal effectiveness and identify the potential and appropriate candidates [5].

According to Kumar [5], media and the effectiveness of advertisement are closely related. Communication is another issue in searching process. Both message & Media have a great importance in selling the organization. So by analyzing the credibility the medium of media should be selected. Generally, there are two types of medium of media those are used for advertisement. They are internet and print media (Newspaper). Around 40% of the world populace has a web association today. In 1995, it was under 1%. The quantity of

web clients (users) has expanded tenfold from 1999 to 2013. the initial billion was arrived at in 2005. The second billion is completed in 2010 and third billion in 2014 [6].

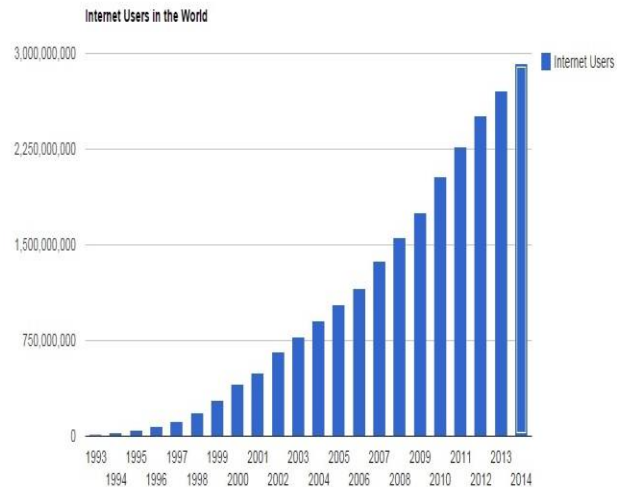


Figure 1.1: Internet users in the world

Source: [6].

Figure shows that the users of internet are increasing very fast with the passage of time. The internet has another advantage that user can search the newspapers (print media) on internet easily. So, we can say that for the purpose of advertisement second type of medium of media (internet) is more effective and credible as compare to classic media (Newspaper).

In 2003 it is predicated that the number of internet users all over the world will reach 750 million by 2008 [7]. After the research of this dramatic growth, the organizations of all over the world started to adopt the e-recruitment system [8]. A research found that E-recruit system saves the hiring time by two third and decreases 90% cost [9]. E-recruitment system saves the time and money so it is cheaper than conventional recruitment system. In this system applicants can apply for their job in few minutes which saves the time of both parties [9].

It was observed from previous studies that there are many factors these are affected by E-recruitment. Most of them are positively affected. The research undertaken in present study will explore the relationship between E-recruitment and

organizational attraction. So research undertaken will study recruitment with respect to organizational attraction. A study on the “Applicant’s Perception towards E-recruitment” was conducted by Rakholiya and Gupta (2013). This research shows that the applicants perceived organizational attraction on the basis of information delivered during the recruitment process. The result of the study also explains the impact of recruitment sources on applicant’s perception. The findings of this study also show that the features of website also affect the E- Recruitment process and attraction towards organization. According to the author charming features of the website attract applicant [10]. So the objectives of our research is to explore the relationship between E-Recruitment and organizational attraction and investigate how Easy to use & Cost Effectiveness mediate the relationship between E-Recruitment and organizational attraction.

2.0 Theoretical Frame Work:

Various studies regarding E-recruitment have proved that organization affected by Electronic Recruitment in the sense of different aspects like efficiency of recruitment, cost and intellectual capital etc. The positive role of E- Recruitment is seen in various studies. However this study explains the relationship b/w E- recruitment and organizational attractiveness. As shown in research model E-recruitment is independent variable and organizational attractions dependent variable. It means if any organization adopts E-recruitment Strategy then there may be any effect on the organizational attractions. It may be positive or negative. This study will measure the independent variable by three factors those are corporate website, social media and third party/job portals. Depended variable would be measured by image /repute, innovativeness and effective internal and external communication. The questionnaire included first four questions to measure E- Recruitment. The questions of this variable are adopted from the study on the topic of “A study on the Applicant’s Perception towards E-recruitment” was conducted by Rakholiya and Gupta. The last question of this variable consists of four categories. These categories show the different source of recruitment. This question is adopted from the study on the topic of “the impact of E- Recruitment and job seekers perceptions on the intention to pursue the jobs” is conducted by Khan et. al. There are other two variables in model 1st. as general impressions and researches show due to E- Recruitment system organization attracts job seekers. It is also cost saving method and job seekers feel easy to access organizations in this method [11]. So, due to these different efficiencies, cost effectiveness and easy to access facility the job seekers are attracted towards the organization. These factors mediate the relationship between E- Recruitment and organizational attraction. These variables are measured by different factors. The cost effectiveness is measured by cost of application form, registry/courier cost and traveling cost. Easy to use is measured by Required Job Search, applying online form, sending cv via E-mail and access to info.

2.1 Research Model:

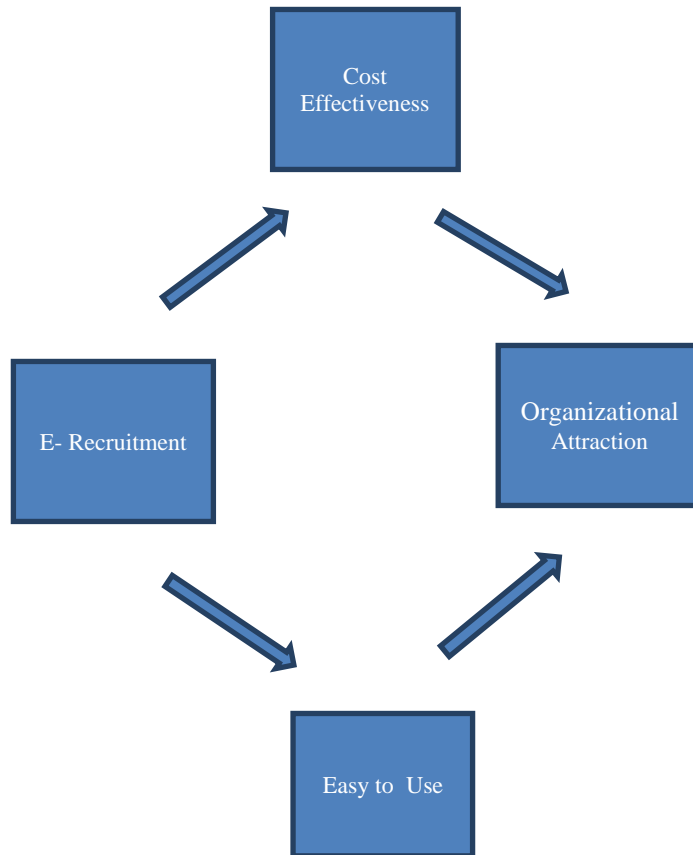


Figure 2.1 Research Model

2.2 Hypothesis:

- H₁ : There is association between E- Recruitment and organizational attraction.
- H₂: Cost Effectiveness mediates the relationship between E- Recruitment and Organizational attraction
- H₃: Easy to use mediates the relationship between E- Recruitment and Organizational attraction.

3.0 Population:

The target population of the present study consisted of the business graduates from various business schools/colleges/institutes/departments or centers of all the universities of the Lahore. The business schools/colleges/institutes/departments or centers from HEC recognized are selected and from those business schools/colleges/institutes/departments or centers only job seekers who are recently engaged in their finals and students of second last semester seeking for job are selected as a population. So, our population is the business graduates from last two semesters. Data collected from 17 business schools and the total population of is 9012. The whole information was gathering from admin and office of examination controller of concerned universities. The sampling technique enable us to obtain information from a relative few respondents to describe the characteristics of

the entire population and it gives efficiency and precision to the results in short time and less expenditures and it also gives flexibility and scope to the attained information. The researcher target population was the various business schools/colleges/institutes/departments or centers of all the universities of the Lahore. In his research the researcher took these business schools/colleges/institutes/departments or centers of all the universities of the Lahore as strata. In order to select the sample size from respective strata, the technique of Stratified Random Sampling was used.

The researcher used the following formula provided by T.Yamne (1967) to determine the sample size.

$$n = \frac{N}{1 + Ne^2}$$

Where

N is Population size.

n is sample size.

And e is level of precision.

In order to determine the total sample size two factors were considered, the level of confidence and level of precision. By assuming 95% confidence level and 6% precision rate, the sample size was

$$n = \frac{N}{1 + Ne^2}$$

Since, N=8791 and e=0.06

So,

$$n = \frac{9012}{1 + 9012(0.06)^2} = 269$$

Thus the sample should at least 269 respondents from different business schools, however we have selected 302 respondents for this study. The data is collected through structured questionnaire.

Cost efficiencies and organizational attraction are measured by three questions each, but Easy to use is measure by four questions on the basis of different recruitment sources. To check the validity of these questions the researcher run factor analysis test on these questions. Following tables show the results of this test.

Total variance explained table show that only one component is constructed on the basis of Eigen value. Table shows that there is only one value which is greater than 1 among each section. So results are revealing that only one construct is measured by developed questions in each section. It shows that developed questions are valid.

The purpose of Component matrix table is to display the Factor Loading Values. Generally the factor loading value is assumed high if it is greater than or equal to 0.70. So, components matrix table shows that all questions have high factor loading value which means the developed questions are valid.

4.2 Reliability Analysis:

Generally, alpha reliabilities above 0.70 are considered good when measured are used is large survey. The instruments used in basic research have reliable of about 0.70 or better in this case [12]. In this case the cronbach's alpha of the Questions of different variables of current study is given below. These questions are developed by following five point likertscale. In this case, as shown in table the cronbach's alpha of the questionnaire is more than 0.8 which is exceptionally good. For the purpose of analysis SPSS 16 and Microsoft 2007 has been used Following results are showing the output of OLS regression analysis where dependent variable is organizational attraction. E- Recruitment is the independent variable and showing a dummy variable that is equal to 1 if respondent select any of E- Recruitment source to apply for job and zero if he or she selected any of other sources.

4.0 RESULTS AND DISCUSSIONS:

4.1 Factor Analysis:

Table 1. Total Variance Explained

Cost Efficiencies						
Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.336	77.873	77.873	2.336	77.873	77.873
2	.503	16.756	94.629			
3	.161	5.371	100.000			
Easy to Use						
1	2.963	74.081	74.081	2.963	74.081	74.081
2	.534	13.349	87.431			
3	.277	6.930	94.361			
4	.226	5.639	100.000			
Organizational Attraction						
1	2.262	75.388	75.388	2.262	75.388	75.388
2	.530	17.657	93.045			
3	.209	6.955	100.000			

Table 2 Component Matrix

	Component
	1
Q5	.846
Q6	.949
Q7	.848
Q8	.795
Q9	.893
Q10	.888
Q11	.863
Q12	.791
Q13	.923
Q14	.886

Table 3. Reliability Statistics

Variable	Cronbach's Alpha
E- Recruitment	.858
Organizational Attraction	.829
Cost Efficiencies	.853
Easy to Use	.881

4.3 Regression Analysis:

4.3.1 E- Recruitment*Organizational Attraction:

Table 4: OLS regression analysis E- Recruitment*Organizational Attraction

	B	t-Value	Sig
(Constant)	3.407	57.721	0.00
E- Recruitment	-1.992	-28.277	0.00
Adj.R2	77.60%		
F-Value	799.593*		
Durbin Watson	1.726		

* Sig at 1%

Discussions and Inference/ Results Drawn by Researcher: Regression coefficient (β) is -1.992 for E- Recruitment and its significant value is 0.000, which shows that E-Recruitment is screening significant impact on organizational attraction. β Means if independent variable E- Recruitment is changed by 1 the dependent variable organizational attraction is increased by 1.992. Generally the sign “-” with Regression coefficient (β) shows that there is negative relationship between independent and dependent variables, But in study undertaken the questionnaire is developed by following the five point likert scale where 1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree and 5= Strongly Disagree. As the lowest point 1= strongly agree which shows that the lowest scores will show the highest association/ positive relationship between the tested variable.

As we found that E- Recruitment has lower scores than Newspaper/Friends and Relatives Referrals/others. It means that organizational attraction is positively affected by E-Recruitment and it also shows that the positive relationship between E- Recruitment and organizational attraction is stronger than the relationship between organizational attraction and Newspaper/Friends and Relatives Referrals/others. In other words we can say that job seekers perceive that E- Recruitment system attracts them more than traditional recruitment system.

As the sample size of this study is not very large and whole population was not used as a sample so adjusted R square has been used for interpretation. Table shows that the value of adjusted R square is 77.60%, which shows that independent variables have 77.60% affect on dependent variable. Table signifies that F= 799.593 and level of significance is 0.000 which is less than 0.05, which shows that model is significantly good fit. Durban Watson value = 1.726 which is less than 3, it shows that results are significant.

4.3.2 E- Recruitment*Cost Effectiveness:

Table 5: OLS regression analysis E- Recruitment*Cost Effectiveness

	B	t-Value	Sig
(Constant)	3.570	65.188	0.00
E- Recruitment	-2.174	-33.159	0.00
Adj.R2	78.70%		
F-Value	1.106E3*		
Durbin Watson	2.051		

* Sig at 1%

Discussions and Inference/ Results Drawn by Researcher:

Regression coefficient (β) is -2.174 for E- Recruitment and its significant value is 0.000, which shows that E-Recruitment is screening significant impact on Cost Effectiveness. β Means if independent variable E- Recruitment is changed by 1 the dependent Cost Effectiveness is increased by 2.174. Generally the sign “-” with Regression coefficient (β) shows that there is negative relationship between independent and dependent variables, But in study undertaken the questionnaire is developed by following the five point likert scale where 1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree and 5= Strongly Disagree. As the lowest point 1= strongly agree which shows that the lowest scores will show the highest association/ positive relationship between the tested variable.

As we found that E- Recruitment has lower scores -2.174 than Newspaper/Friends and Relatives Referrals/others. It means that Cost Effectiveness is positively affected by E-Recruitment and it also shows that the positive relationship

between E- Recruitment and Cost Effectiveness is stronger than the relationship between Cost Effectiveness and Newspaper/Friends and Relatives Referrals/ others. In other words we can say that job seekers perceive that E-Recruitment system saves their money as compare to traditional recruitment system.

As the sample size of this study is not very large and whole population was not used as a sample so adjusted R square has been used for interpretation. Table shows that the value of adjusted R square is 78.70%, which shows that independent variables have 78.70% affect on dependent variable. Table signifies that F= 1.106E3 and level of significance is 0.000 which is less than 0.05, which shows that model is significantly good fit. Durban Watson value = 2.05 which is less than 3, it shows that results are significant.

4.3.3 Cost Effectiveness*Organizational Attraction:

Table 6: OLS regression analysis Cost Effectiveness*Organizational Attraction

Following results are showing the output of OLS regression analysis where dependent variable is organizational attraction. Cost Effectiveness is the independent variable.

	B	t-Value	Sig
(Constant)	0.262	4.615	0.00
Cost Effectiveness	0.854	36.017	0.00
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Adj.R2	80.30%		
F-Value	1.226E3*		
Durbin Watson	1.936		

* Sig at 1%

Discussions and Inference/ Results Drawn by Researcher:

Regression coefficient (β) is 0.854 for Cost Effectiveness and its significant value is 0.000, which shows that Cost Effectiveness is screening significant impact on Organizational Attraction. β Means if independent variable Cost Effectiveness is changed by 1 the dependent Organizational Attraction is increased by 0.854. As the sample size of this study is not very large and whole population was not used as a sample so adjusted R square has been used for interpretation. Table shows that the value of adjusted R square is 80.30%, which shows that independent variables have 80.30% affect on dependent variable. Table signifies that F= 1.226E3 and level of significance is 0.000 which is less than 0.05, which shows that model is significantly good fit. Durban Watson value = 1.936 which is less than 3, it shows that results are significant.

Discussions and Inference/ Results Drawn by Researcher:

As the table shows E- Recruitment and cost effectiveness have significant values, which show that cost effectiveness partially mediates the relationship between E- Recruitment and Organizational Attraction. As the sample size of this study is not very large and whole population was not used as a sample so adjusted R square has been used for interpretation. Table shows that the value of adjusted R square is 81.80%, which shows that independent variables have 81.80% affect on dependent variable. Table signifies that F= 676.761 and level of significance is 0.000 which is

less than 0.05, which shows that model is significantly good fit. Durban Watson value = 1.857 which is less than 3, it shows that results are significant.

4.3.4 E- Recruitment, Cost Effectiveness*Organizational Attraction:

Table 7: OLS regression analysis E- Recruitment, Cost Effectiveness*Organizational Attraction

Following results are showing the output of OLS regression analysis where dependent variable is Organizational Attraction. E- Recruitment & Cost Effectiveness are the independent variables. E-Recruitment is showing a dummy variable that is equal to 1 if respondent select any of E- Recruitment source to apply for job and zero if he or she selected any of other sources.

	B	t-Value	Sig
(Constant)	1.171	6.261	0.00
Cost Effectiveness	0.626	12.323	0.00
E- Recruitment	0.632	-5.082	0.00
<hr/>			
Adj.R2	81.80%		
F-Value	676.761*		
Durbin Watson	1.857		

* Sig at 1%

4.3.5 E- Recruitment*Easy to Use:

Table 8: OLS regression analysis E- Recruitment*Easy to Use

Following results are showing the output of OLS regression analysis where dependent variable is Easy to Use. E- Recruitment is the independent variable and showing a dummy variable that is equal to 1 if respondent select any of E- Recruitment source to apply for job and zero if he or she selected any of other sources.

	B	t-Value	Sig
(Constant)	3.494	73.785	0.00
E- Recruitment	-2.721	-37.516	0.00
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Adj.R2	82.40%		
F-Value	1.407E3*		
Durbin Watson	2.101		

Discussions and Inference/ Results Drawn by Researcher:

Regression coefficient (β) is -2.721 for E- Recruitment and its significant value is 0.000, which shows that E-Recruitment is screening significant impact on Easy to Use. β Means if independent variable E- Recruitment is changed by 1 the dependent Easy to Use is increased by 2.721. Generally the sign “-” with Regression coefficient (β) shows that there is negative relationship between independent and dependent variables, But in study undertaken the questionnaire is developed by following the five point likert scale where 1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree and 5= Strongly Disagree. As the lowest point 1=

strongly agree which shows that the lowest scores will show the highest association/ positive relationship between the tested variable.

As we found that E- Recruitment has lower scores -2.721 than Newspaper/Friends and Relatives Referrals/others. It means that Easy to Use is positively affected by E-Recruitment and it also shows that the positive relationship between E- Recruitment and Easy to Use is stronger than the relationship between Easy to Use and Newspaper/Friends and Relatives Referrals/ others. In other words we can say that job seekers perceive that E- Recruitment system is easier to use for job seekers as compare to traditional one.

As the sample size of this study is not very large and whole population was not used as a sample so adjusted R square has been used for interpretation. Table shows that the value of adjusted R square is 82.40%, which shows that independent variables have 82.40% affect on dependent variable. Table signifies that $F= 1.407E3$ and level of significance is 0.000 which is less than 0.05, which shows that model is significantly good fit. Durban Watson value = 2.10 which is less than 3, it shows that results are significant.

4.3.6 Easy to Use*Organizational Attraction:

Table 9: OLS regression analysis Easy to Use*Organizational Attraction

Following results are showing the output of OLS regression analysis where dependent variable is organizational attraction. Easy to Use is the independent variable.

	B	t-Value	Sig
<i>(Constant)</i>	0.251	3.961	0.00
<i>Easy to use</i>	0.877	31.517	0.00
<hr/>			
<i>Adj.R2</i>	76.80%		
<i>F-Value</i>	993.35*		
<i>Durbin Watson</i>	2.112		

*' Sig at 1%

Discussions and Inference/ Results Drawn by Researcher:

Regression coefficient (β) is 0.877 for Easy to Use and its significant value is 0.000, which shows that Easy to Use is screening significant impact on Organizational Attraction. β Means if independent variable Easy to Use is changed by 1 the dependent Organizational Attraction is increased by 0.877. As the sample size of this study is not very large and whole population was not used as a sample so adjusted R square has been used for interpretation. Table shows that the value of adjusted R square is 76.80%, which shows that independent variables have 76.80% affect on dependent variable. Table signifies that $F= 993.35$ and level of significance is 0.000 which is less than 0.05, which shows that model is significantly good fit. Durban Watson value = 2.11 which is less than 3, it shows that results are significant.

4.3.7 Easy to Use, E- Recruitment*Organizational Attraction:

Table10: OLS regression analysis Easy to Use, E- Recruitment*Organizational Attraction

Following results are showing the output of OLS regression analysis where dependent variable is Organizational Attraction. E- Recruitment & Easy to Use are the independent variables. E- Recruitment is showing a dummy variable that is equal to 1 if respondent select any of E-Recruitment source to apply for job and zero if he or she selected any of other sources.

	B	t-Value	Sig
<i>(Constant)</i>	1.375	6.008	0.00
<i>Easy to Use</i>	0.585	9.123	0.00
<i>E- Recruitment</i>	-0.759	-5.696	0.00
<hr/>			
<i>Adj.R2</i>	78.50%		
<i>F-Value</i>	556.998*		
<i>Durbin Watson</i>	1.969		

*' Sig at 1%

Discussions and Inference/ Results Drawn by Researcher:

As the table shows E- Recruitment and Easy to use have significant values, which show that cost effectiveness partially mediates the relationship between E- Recruitment and Organizational Attraction. As the sample size of this study is not very large and whole population was not used as a sample so adjusted R square has been used for interpretation. Table shows that the value of adjusted R square is 78.50%, which shows that independent variables have 78.50% affect on dependent variable. Table signifies that $F= 556.998$ and level of significance is 0.000 which is less than 0.05, which shows that model is significantly good fit. Durban Watson value = 1.969 which is less than 3, it shows that results are significant.

5.0CONCLUSION

The research work mainly focuses on findings of online recruitment system and its efficiencies. We visited different business schools and collect data carefully. The data was examined in depth for the understanding of E- Recruitment and its impact on organizational attraction. Finally the general objectives of this research work which is to investigate the relationship between E- Recruitment and organizational attraction have been achieved.

This research work observed the perception of job seekers towards E- Recruitment and its affect on the attraction of organization in order to evaluate the effectiveness of E-Recruitment. Moreover, this research work also observes that how this strategy reduce the expenditures of job seekers and how is it easy to use. This study also examines that how the cost effectiveness and easy to use mediate the relationship between E- Recruitment and organizational attraction. Finally, after all analysis it was analyzed by the perceptions

of job seekers how electronic recruitment can affect the attraction of organization. The results are discussed at the end of every analysis. The findings of the research work are also discussed. The results of this study suggest that E-Recruitment system has a positive impact on candidate and it increases the attraction of the organization among its rivals. According to the findings and results of this study E-Recruitment is easier to use and it saves the money of job seekers. It is found that E-Recruitment System has a positive impact on cost effectiveness and easy to use and these factors enhance the relationship between E-Recruitment and organizational attraction. It means that the organization which adopts that E-Recruitment Strategy becomes prominent among the job seekers and due to the fruits of E-Recruitment and prominence of organization competent job seekers will prefer to join such kind of organization. The study implies that the human resources practitioners and policy makers need to improve the E-Recruitment system to attract the candidates. Implementing E-Recruitment methods can provide significant benefits to organizations the recruitment study shows that in future every organization that wants to meet the goals and competitive advantages has to adopt this E-Recruitment system.

DEDICATIONS:

Author dedicates this study to his parents Mr. Muhammad Siddique and Safiya Siddique for precious help and moral support.

REFERENCES:

- [1] **Milkovich, G. T., & Boudreau, J. W.** "*Human Resource Management*", Irwin Professional Publishing, (8th. ed.), (2008).
- [2] **Flippo, E. B.**, "*Personnel management*", McGraw-Hill, (5th. ed.), (2008)
- [3] **Decenzo, D. A., & Robbin, S. P.** "*Fundamentals of Human Resource Management*". Wiley. (third, Ed.) , (1988).
- [4] **Tyson, S., & York, A.** "*Essentials of HRM*" Butterworth-Heinemann. (4th. ed.). (2000).
- [5] **Kumar, R.** "*Human Resource Management: Strategic Analysis Text And Cases*". I. K. International Pvt Ltd. New Delhi, India. (2011).
- [6] <http://www.internetlivestats.com/internet-users/#sources>. [Online] [Cited: 01 15, 2015.]
- [7] **Turban, E., and King, D.** "Electronic Commerce", Prentice Hall International, New Jersey, 2003.
- [8] **Hoffman, D.** "E-Recruitment and the war for talent", NAGCAS Connect Olivier, 2001.
- [9] **Musa, N., Junaini, S. N., & Bujang, Y. R.** "Improving Usability of E-recruitment Website: A Preliminary Study on Sarawak Government Website. *Study Background*", (*Pacis*) , 507–515. (2006)
- [10] **Rakholiya, M. N., & Gupta, M. C.** "A study on the Applicant's Perception towards E-recruitment". *International Multidisciplinary Journal of Applied Research*, 1 (1), 50-53. (2013).
- [11] **Khan, Naveed Ur Rehman, Taha, Dr. S. M. and Ghouri, Arslan Mujahid.** "*Bridging the gap through E-Recruitment: Evidences from private employment sector in Karachi* ", Indian Journal of Commerce & Management Studies, Vol. II, pp. 40-48, 2011.
- [12] **Nunnally, J. C.** "*Psychometric theory*". McGraw-Hill. (2nd ed. ed.). New York, (1978).