

BRAIN DRAIN OF BUSINESS AND IT GRADUATES IN PAKISTAN

Aamir Abbas*

Subhash Guriro**

ABSTRACT

Brain drain is the migration of highly skilled professionals to developed countries in world and due to this transfer the developing countries are facing the shortage of human talent and expertise in the different fields of life. In Pakistan brain drain has become an increasing trend among the highly qualified professionals in last decade and limited evidence available to understand the phenomenon especially in business and Information Technology (IT) sectors. The main objective of this study was to know the current trends in brain drain of graduates in business and IT fields and explore factors responsible for that. In order to assess the causes of brain drain among graduate professionals of Pakistan this study randomly recruited 150 respondents from IT and business sectors. A survey was conducted in the Karachi city. Structured questionnaire was used to collect the data on different variables of economic, political and social factors causing brain drain in Pakistan. SPSS version 22 was used for data analysis. The results support some socio-economic, social and political factors are responsible for brain drain in Pakistan. Graduates' perceptions of high salary packages, high living standard, peace and better future of children are those factors which motivate them to migrate from their own country. This original study has increased the understanding of drain of business and IT graduates in Pakistan. Study findings can guide the government and policy makers to identify real factors behind the migration of highly skilled graduates and make policies to retain its human capital.

Keywords: Brain drain, Pakistan, Business, Information Technology

JEL Classification: A2

1. INTRODUCTION

Brain drain is a multidimensional and complex phenomenon. Now a day we often come to listen about the term Brain Drain in our daily routine life on media as well as by literary people and intellectuals, but only a few people are familiar with this term of Brain Drain. Like people has been divided in different fields of life through different definitions according to their profession. Academician of different sciences has categorized this world according to their said profession and terms. It means that everyone has its own imaginations and observations. So they took this brain drain phenomenon in perspective of their particular fields. According to the World Bank report, brain drain is the migration of skilled and professional human resources for trade, education, business, quality of life and better job opportunities.¹

The population of the world had witness a theatrical economic growth in the recent years due to the effects of the globalization and industrialization. Economic growth is much important for every country which not only indicates the employment ratio, but it also indicates the quality of life, living standards as well as its health also. Due to the rapid growth in globalization and industrialization it has made the developed countries to attract the highly qualified, highly skilled and intellectuals from developing countries by providing the better opportunities, ultimately due to this heavy flow of professionals' external migration, developing countries are facing the shortage of human talent who prefer to seek better opportunities in foreign countries². Despite the facts those skilled and professionals people are being considered the back bone of the country's economy, who contribute to steer it in the positive direction for achieving the desirous economic goals³.

Trained professionals of various fields either they are from health, business, computer science, information technology, engineering or technical are much needed in every part of the world because these professionals and skilled manpower play a significant role to beef up the economy of the country. Brain drain is an intended phenomenon of migration from developing countries in favor of developed countries by skilled labor with a higher level of education generally following a better income, living standards and job security as well as to enhance their professional

*Corresponding Author, MS Student, SMI University Karachi. E-mail: aamirrana798@gmail.com

**Assistant Professor, Department of Business Administration SMI University Karachi

¹ World Bank, brain drain in developing countries, (2000)

² Binod Khadria, "The Brain Drain from Developing Countries: Analysis of Impact and Policy Issues", International Migration Paper", "Skilled Labour Migration", 2002

³ Malik Fahem Bashir "Key Factors Determining the Rational for Brain Drain; An Irony Never Recovered, 2000

skills in a comfortable environment. So in this aspect better living standards, political stability, rule of law, equality, better job opportunities, high salary packages, job security and better quality of education are those factors which attract the highly skilled professionals of different fields from less developed countries towards the relative developed countries. The migration from course of highly skilled migrants has been increasing after the world war two over the last few decades.⁴ Eventually in 1980s and much of the 1990s concerning the migration of professionals and skilled manpower became again mostly debatable topic and got the international community's great concern for debate⁵.

According to United Nation population division report in 2002 almost 175 million people or 2.9% of the world population were living outside their country of birth for more than a one year. Therefore, scholars and intellectuals of the world are highlighting this brain drain issue very seriously across the world.⁶

So in this aspect there is a huge difference in the quality of life, better job opportunities and better living standards between the relative developing countries and developed countries. Better socio economic figures, political stability and rule of law are those factors which attracts the highly skilled manpower from developing countries to developed countries. Pakistan is a developing south Asian country. Youth under the age of 25 constitutes 63% of total population of Pakistan. Youth has the power to steer the country into the next phase of political stability and economic developments if they effectively utilize their skills. Our Youth is socially responsible and moreover working dedicatedly to see Pakistan attains and developed status.

With every passing year of Pakistan, it's an increasing trend among the youth of university graduates of business, doctors, computer science, commerce and information technology who are migrating to developed countries like USA, Europe and Middle East countries. According to Bureau of Immigration and Overseas Employment since 1971 up to Sep 2016 almost 9.4 million overseas Pakistanis are working or living around the globe. Mostly overseas Pakistani are working in Middle East 49.2%, Europe 28.3% and USA 16.2% (bureau of immigration and overseas employment). There are several causes of the university graduates of Pakistan who are migrating to developed countries or might be thinking for migration. The main causes may be unemployment, political, instability, social factor, economic factor, bad governance, no quality of life, less foreign investment and specially the terrorism might be the key factor for external migration of university graduates. A recent study by World Bank highlighted this issue like this way that shortage of the skilled workers in a country is the main hurdle of power achievements of industrial growth and development⁷.

1.1. Objective of the study

The purpose of this research is to explore the most influencing factor causing brain drain among Business and I.T graduate professional of Pakistan.

Specific Objectives:

- To identify the economic factors causing brain drain for graduate professionals
- To identify the political factors causing brain drain for graduate professionals
- To identify the social factors causing brain drain for graduate professionals

1.2. Hypotheses

The research has developed following hypothesis.

H1: There is a significant relationship of job relevant to qualification/degree with brain drain of Business & I.T graduate

H2: There is a significant relationship of family member living abroad with brain drain of Business & I.T graduate

H3: There is a significant relationship of high salary package with brain drain of Business & I.T graduate

2. LITERATURE REVIEW

The issue of external migration is always remained the matter of great concern for scholars, intellectuals and policy makers across countries over last many decades⁸. But in recent era, the issue of brain is again getting the focus of

⁴ Muhammad Aamir Hashmi, Ashi Zeeshan, Tariq Mehmood, Syed Abir Hussain Naqvi, Faiz M. Sheikh, "factors driving brain drain in pakistan: an exploratory view", Journal Of Asian Business Strategy, Vol 2 No 2, 2012 Pp. 9

⁵ ibid

⁶ Aubert,C. & Xiande.L, "Domestic Unemployment And Migration", "Journal Of Domestic Unemployment", (2002) Vol.47

⁷ Gillani,I. & Malik, "Pakistan infrastructure implement capacity assessment", Report no. 43186, Discussion Paper Series: technical note 2, (South Asia Sustainable Development Unit, 2007".

⁸ M. Carolina Brandi, "Skilled Immigration in Rome", International Migration, (2001), Vol. 39(4)

relative developing countries scholars, intellectuals and policy makers that why the skilled and professional manpower is ready to migrate towards the developed countries⁹.

Since origin of the term brain drain, it is divided in three phases. In first phase from 1950s to 1960s decade, the term brain drain first time it was introduced by British royal societies in early 1950s and 1960s when intellectuals and professionals particularly scientist and technologist start migrating towards USA and Canada after the world war two. Brain Drain is also known as human capital, where the heavy flow of highly skilled manpower is only in one direction. After the 2nd world war in 1950s and 1960s decade, in the field of technology and science, the developed and less advanced countries are contributing vocational and cognitive minds¹⁰. The migration of highly skilled manpower has a very bad impact socially and economically on experiencing country.

In 2nd phase from 1970s-1990s decade majority of scholars, intellectuals and policy makers finally stated that the term brain drain is a great loss of highly skilled manpower from developing countries in the favor of developed countries. By keeping all these facts, it is the need of the time to implement migration polices around the globe to find out the solution of this brain drain. The purpose of this migration policy was to enhance the role of international organization and institution to manage this heavy flow of external migration of highly skilled manpower¹¹.

In recent era most countries are facing the issue of brain drain across the globe, and his finding revealed that under developed countries are losing their highly skilled intellectuals and professional manpower in all sciences whether they are from information technology, computer science, engineering, doctors or business and all these highly skilled professionals are migrating towards the USA, Europe and Middle East countries due to political instability and economic change in experiencing country.

It is cited by Harrison & Francis that 75% skilled, semi-skilled and highly people of Ethiopia migrated between two decades from 1980s to 1990s, which has resultantly affected the performance of such a developing countries to alleviate poverty from their country¹². In the continent of Africa the figures of brain drain is alarming. Among the African continent countries figures of external migration are much alarming in Nigeria and Ethiopia due to political instability, absence of rule of law, unemployment and declining economic growth. Both sides of the world, which are brain drain and brain gain countries has started the debate on this issue for their own interest and concerns. Migration of highly skilled people has become a global phenomenon and emerging trend among professionals in terms of overseas engagements and job opportunities¹³. Where migration of this highly skilled manpower has filled the gap of trained labor for developed countries but on the other hands it is promoting underemployment and unfeasible working conditions. Economies of the world are directly indirectly depending on the knowledge: the migration of highly skilled labor is also a great threat for the economy of developing countries¹⁴.

¹⁵One of the research has shown their equilibrium approach in brain drain and said “less number of overseas job opportunities leads to less number of experiencing countries demand and low cost of living; a very low experiencing country of brain drain cost of living supports the equilibrium, where only a few have advantages to work overseas countries.

⁹ Binod Khadria, “The Brain Drain From Developing Countries: Analysis Of Impact And Policy Issues”, International Migration Paper”, “Skilled Labor Migration”, 2002

¹⁰ Herbert G Grubel, Anthony Scott, “The brain drain: determinants measurement and welfare effects”, Canadian journal of economics, 1978, vol 11 no 3

¹¹ Jagdesh Bhagwati, “The Brain Drain International Integration Of Markets For Professional And Unemployment: A Theoretical Analysis”, Journal Of The Economoics, (1974), 1, 19-24

¹² Hashmi,A,M. Zeeshan,A, Mehmood,T. Naqvi,H,A,S. & M,Shiekh. (2012), “factors driving brain drain in pakistan: journal of asian business strategy, Vol. 2, pp. 7-20

¹³ M. Carolina Brandi, “Skilled Immigration In Rome”, International Migration, (2001), Vol. 39(4)

¹⁴ Said Ouaked, “Translantic roundtable on high skilled migration and sending countries issues”, International Migration, 2002, Vol 40 No 4, 155

¹⁵ Barry McCormick, Jackline Wahba, Overseas employment and remittances to a dual economy, The Economic Journal, 2000, 509- 34

Table 2.1: Skill composition of Pakistani emigrants

Year	Highly Qualified	Highly Skilled	Skilled	Semi-Skilled
2010	7081	31650	165726	5181
2011	6974	3018	171672	73247
2012	9298	4202	261531	104240
2013	12057	5032	263138	102963
2014	14647	6216	287649	120204
2015	17484	7853	397317	151636
2016	16510	8172	335671	152235
2017	16029	9886	188745	195940
Total	100080	76029	2071449	905646

Source: Bureau of emigration and overseas employment Pakistan (Annual plan 2010-17)

According to UNESCO 127th executive conference discussed about the migration of highly skilled manpower of Pakistan. The migration of highly skilled manpower of Pakistan increased by more than 50% from 6.1 in 1990 to 9.2 in 2000. Since 1971 the migration of highly skilled and qualified professional consisting of engineers, doctors, IT specialists, business and computer science are trained by the Government institutions. But with the migration of doctors, engineers, business and computer science graduates the profession related to all these concerns are badly affected.

Table 2.2: Country wise migration of Pakistanis for employment purpose

Country	2010	2011	2012	2013	2014	2015	2016	2017	Total
KSA	189888	222247	358560	270502	312489	522750	462598	143363	2482397
UAE	113312	156353	182630	273234	350522	326986	295647	275436	1974120
Oman	37878	53525	69407	47794	39793	47788	45085	42362	383632
Qatar	3039	5121	7320	8119	10042	12741	9706	11592	67680
Malaysia	3287	2092	1309	2031	20577	20216	10625	7174	67311
Bahrain	5877	10641	10530	9600	9226	9029	8226	7919	71048
U.K	430	308	183	158	250	260	346	340	2275
U.S.A	196	182	164	226	351	350	289	229	1987
Italy	3738	2875	3361	2068	1563	431	242	141	14419

Source: Bureau of emigration and overseas employment Pakistan (Annual plan 2010-17)

Pakistani government to provide those better opportunities and comfortable environment to retain its qualified professionals. According to Gallup survey which was conducted in year 2000, the objective of this survey was to know about the youth of Pakistan that either they want to go abroad or not. After conducting the survey report, it was highlighted that two third youth of Pakistan is willing to go abroad for better job opportunities, while among those, half of the youth don't want to come back in Pakistan and they wanted to settle down their self in abroad. Finally, Gallup survey concluded that economy is a key push factor for youth of Pakistan that they prefer to go and live in developed countries,

A similar kind of a survey was conducted in 1984, at that time 17% of the youth population showed their desire to go abroad for work or they wanted to settle down their self in foreign countries¹⁶. Gallup survey of (2000) highlighted that if we compare issue of brain drain in Pakistan with previous conducted surveys then it has increased since two decades. Survey indicates that youth of Pakistan are ready and willing whether they are skilled, semi-skilled, and unskilled along with highly skilled, professionals like doctors, engineers, I.T, business and computer science university graduates in pursuit of better job opportunities and perspectives.

¹⁶ Muhammad Aamir Hashmi, Ashi Zeeshan, Tariq Mehmood, Syed Abir Hussain Naqvi, Faiz M. Sheikh, "factors driving brain drain in pakistan: an exploratory view", Journal Of Asian Business Strategy, Vol 2 No 2, 2012 Pp. 9

Table 2.3: Profession wise migration of Pakistanis for employment in abroad

Profession	2010	2011	2012	2013	2014	2015	2016	2017	Total
Engineer	2408	2951	3577	2764	6668	7322	2453	4021	32164
Doctor	819	1453	1218	1131	2074	2276	2779	1632	13382
Accountant	1381	1802	2593	3473	3573	4698	4768	5856	28144
Manager	1936	2272	2797	3849	4990	6459	6698	7739	36740
Teacher	537	615	956	868	975	1171	1203	1854	8179

Source: Bureau of emigration and overseas employment Pakistan (Annual plan 2010-17)

According to Gallup survey of Pakistan About 63% youth of Pakistan showed their interest to go abroad for job. As many as 38% youth of Pakistan said they would like to prefer settle down their self in abroad. After the Gallup survey of Pakistan (2000) it was an eye opener for the concerning authorizes and policy makers of Pakistan to identify main causes of brain drain among youth¹⁷.

World Bank study of (2007) highlighted that Pakistan infrastructure capacity of skill man power was 1.236 million from 1971-2000, but within five years of time period, skilled manpower increased up to 1.641 million during 2000-2005. After the deep study of previous researches, literature review, scholars & intellectuals interviews it is identified that which are the main causes of brain drain in Pakistan among youth.

Causes of brain drain are mainly categorized in two main factors and those are push and pull factors which are totally concerned with unequal economic developments of the under develop and developed countries, beside these causes there are certain other contrasting issues relating to brain drain according to the previous literature, researches and professional opinion. They are as following.

- Economic factors
- Political factors
- Social factors

One of the study investigate the economic aspect, better job opportunities, better economic growth, healthy and feasible working environment, high salary packages, labor laws and labor rights are those main causes which attracts the professional, intellectuals and highly skilled manpower from developing countries towards the developed countries¹⁸.

Political stability, condition of law and order, mutual harmony, national integration, provision of justice, equality, balance in tiers of government national cohesion are also main causes which are driving factors of brain drain among professional and highly skilled manpower in political aspect¹⁹.

One of the study describes social aspect like this that social security, provision of equal rights, freedom of expression, freedom of life, culture and social norms are those social indicators in developed countries which attracts the professional and highly skilled manpower from developing countries. Now a day's terrorism and less economic developments are the two main causes of this phenomenon of brain drain of highly skilled and graduates of different sciences towards the developed countries²⁰.

3. METHODOLOGY

Present study was designed to determine the causes of brain drain among graduate professionals in Pakistan, a survey was conducted in Karachi to assess the causes of brain drain in Pakistan. Karachi is the biggest city and most populous city of Pakistan and it has a population of 24 million and it is comprised of different ethnicities and identities from all over the Pakistan. Researcher selected a particular universe for data collection which are Business and I.T graduate professionals of Pakistan. Data was collected through well-structured questionnaire. A sample size of 150 respondents

¹⁷ Gallup Pakistan Press Release (878) - In Logical Order "Annual Hope and despair/ Optimistic and Pessimistic Index for Pakistan 2000-2009".

¹⁸ Faroq Azam, "New Frontiers Of Social Policy", Journal Of Public Policy To Supply International Migration In Pak 2005 – Pp 72-95

¹⁹ Muhammad Aamir Hashmi, Ashi Zeeshan, Tariq Mehmood, Syed Abir Hussain Naqvi, Faiz M. Sheikh, "factors driving brain drain in pakistan: an exploratory view", Journal Of Asian Business Strategy, Vol 2 No 2, 2012 Pp. 9

²⁰ ibid

was selected through stratified random sampling technique. 75 respondents were selected from each stratum to assess the causes of brain drain among graduate professionals of Pakistan. Questionnaire was consisting on demographic, social, economic and political factors. Likert scale was used to assess the causes of brain drain from the respondents. SPSS version 22 was used for data analysis. After data analysis, it is presented in the shape of appropriate charts and graph.

4. RESULTS AND DISCUSSION

In present study 50% of the respondents were business graduate and remaining 50% respondents were I.T graduate. Results of the table 4.1 contains demographic characteristics and it is indicated that 54 % of the respondents were male followed by 46% were female.

Table 4.1 Demographic characteristics of the respondents

Var	Freq	Per	Var	Freq	Per
Gender			Marital Status		
Male	81	54	Single	68	45.3
Female	69	46	Married	82	54.7
Age Group			Level Of Education		
21-25 years	11	7.3	Graduate	91	60.7
26-30 years	45	30.0	Master	56	37.3
31-35 years	72	48.0	PhD	3	2.0
36-40 years	10	6.7	Job Status		
41 & above	12	8.0	Unemployed	27	18.0
Family members/relatives live in abroad			Employed	49	32.7
Yes	56	37.3	Student	48	32.0
No	94	62.7	Business	26	17.3

Job relevant to study/degree		
Variable	Frequency	Percentage
Yes	63	42
No	87	58

It is indicated in the table in terms of marital status that 45.3% of the respondents were single followed by 54.7% were married. In terms of age group majority of the respondents 48% belong to 31-35 years' age group and majority of the respondent's 60.7% education level was graduate. In terms of employment status of the respondent's majority of the respondents 32.7% of the respondents were employed followed by 32% student, 18% were unemployed and remaining 17.3% of the respondents were associated with their own business.

In terms of the job relevant to degree or qualification results of the table highlights that majority of the respondents 58% revealed that their job was not relevant to their professional degree of qualification and remaining 42% of the respondent's highlights that their job is relevant to their professional degree or qualification.

During the study respondents were investigated about the family member or friends live in abroad. Results of the table indicate that 62.7% of the respondents stated that their family members don't live in abroad whereas 37.3% of the respondents stated that their family members/friends live in abroad.

Table 4.2 Trends of brain drain

Applied for job in foreign countries		
Variable	Frequency	Percentage
Yes	72	48.0
No	78	52.0

Results of the table 4.2 also highlights that 48% of the respondents applied for job in foreign countries and remaining 52% of the respondents revealed that they did not apply for jobs in foreign countries.

Table 4.3 Trends of brain drain

Try for Immigration		
Variable	Frequency	Percentage
Yes	46	30.7
No	88	58.7
In process	16	10.7

During the study it was highlighted that majority of the respondents 58.7% of the respondents did not try for immigration whereas 30% of the respondents revealed that they tried for immigration and remaining 10.7% of the respondents stated that their try for immigration is under process.

Table 4.4 Trends of brain drain

Willing to go abroad		
Variable	Frequency	Percentage
Yes	87	58.0
No	63	42.0

Results of the table 4.4 highlights the respondent's intention in terms of willing to go abroad. It shows that significant figure 58% of the respondents were willing to go abroad and remaining 42% of the respondents did not show their intention to go abroad.

4.1 Analysis of agreement level regarding most influencing factors responsible for brain drain

Table 4.5 High salary package are causing brain drain

High salary packages		
Variable	Frequency	Percentage
Strongly agree	62	41.3
Agree	37	24.6
Neutral	38	25.3
Strongly disagree	3	2.0
Disagree	10	6.6

In above mentioned table 4.5 results shows that 40% of the respondents strongly agree that high salary package is attracting the immigrants towards the developed countries followed by 26% agree, 22.7% neutral, 9.3% disagree and remaining 2% of the respondents strongly disagree about the statement.

Table 4.6 Better employment opportunities are causing brain drain

Better employment opportunities		
Variable	Frequency	Percentage
Strongly agree	64	42.7
Agree	45	30.0
Neutral	23	15.3
Strongly disagree	3	2.0
Disagree	15	10.0

Results of the Table 4.6 indicates that 42.7% of the respondents strongly agree that better employment opportunities are attracting the immigrants towards the developed countries followed by 30% responded as agree.

Table 4.7 Quality of education are causing brain drain

Quality of education		
Variable	Frequency	Percentage
Strongly agree	79	52.7
Agree	31	20.7
Neutral	22	14.7
Strongly disagree	3	2.0
Disagree	15	10.0

Results of the table 4.7 shows that the quality of education is attracting the immigrants towards the developed countries in which majority of the respondents 52.7% strongly agree followed by 20.7% agree and 14.7% responded as neutral.

Table 4.8 Quality of life is causing brain drain

Quality of life		
Variable	Frequency	Percentage
Strongly agree	66	44.0
Agree	29	19.3
Neutral	26	17.3
Strongly disagree	14	9.3
Disagree	15	10.0

In above mentioned table 4.8 majority of the respondents 44% strongly agree followed by 19.3% agree that quality of life is attracting the immigrants towards the developed countries.

Table 4.9 Better law and order situation is causing brain drain

Better law and order situation		
Variable	Frequency	Percentage
Strongly agree	61	40.7
Agree	32	21.3
Neutral	27	18.0
Strongly disagree	14	9.3
Disagree	16	10.7

Results of the table 4.9 shows that majority of the respondents 40.7% strongly agree followed by 21.3% agree and 18% respondent's response was neutral about the statement that provision of better law and order situation is attracting the immigrants towards the developed countries.

Table 4.10 Stable political situation is causing brain drain

Stable political situation		
Variable	Frequency	Percentage
Strongly agree	35	23.3
Agree	46	30.7
Neutral	39	26.0
Strongly disagree	16	10.7
Disagree	14	9.3

Results of the table 4.10 shows that 23.3% of the respondents strongly agree followed by 30.7% agree that stable political situation is attracting the immigrants towards the developed countries whereas 27% responded as neutral.

Table 4.11 Better opportunities for children and family future is causing brain drain

Better opportunity for children and family future		
Variable	Frequency	Percentage
Strongly agree	41	27.3
Agree	61	40.7
Neutral	35	23.3
Strongly disagree	11	7.3
Disagree	2	1.3

Results of the table 4.11 shows that 40.7% of the respondents agree followed by 27.3% strongly agree and 23.3% respondent's response was neutral about the statement that better opportunity for family and children future is attracting the immigrants towards the developed countries.

Hypothesis 1: There is a significant relationship of job relevant to qualification/degree with brain drain of business and IT graduates

Table 4.12: Hypothesis 1

Job Relevant Degree	Try for Immigration			Total
	Yes	No	In process	
Yes	46	1	16	63
No	0	87	0	87
Total	46	88	16	150

Chi square: 145.942a; DF: 2; Sig: 0.000; P value: .702; Sig: 0.000

The above mentioned table indicates the chi square test results to check the relationship between two variable jobs relevant to qualification/degree and try for immigration. Chi square value 145.942a which is higher than the DF value 2 which is highly significant at 0.000 values. Therefore, the existing hypothesis entitled "There is a significant influence of job relevant to qualification/degree is causing brain drain" is statistically accepted. The P value of co-efficient is .702 which shows a strong relationship between these two variables.

Hypotheses 2: There is a significant relationship of family members living in abroad with brain drain of business and IT graduates

Table 4.13: Hypothesis 2

Family Member Live in Abroad	Try for Immigration			Total
	Yes	No	In process	
Yes	37	5	14	56
No	9	83	2	94
Total	46	88	16	150

Chi square: 91.420a; DF: 2; Sig: 0.000; P value: .615; Sig: 0.000

The above mentioned table indicates the chi square test results to check the relationship between two variable family members live in abroad and try for immigration. Chi square value (91.420a) which is higher than the DF value 2 which is highly significant at 0.000 values. Therefore, the existing hypothesis entitled "influence of family member living in abroad causing brain drain is statistically accepted.

The P value of co-efficient is .615 which shows a strong relationship between these two variables.

Hypothesis 3: There is a significant relationship of high salary package with brain drain of business and IT graduates

Table 4.13: Hypothesis 3

High Salary Package	Try for Immigration			Total
	Yes	No	In process	
Strongly agree	24	31	5	60
Agree	9	25	5	39
Neutral	10	21	3	34
Strongly disagree	0	1	2	3
Disagree	3	10	1	14
Total	46	88	16	150

Chi square: 14.801a; DF: 8; Sig: 0.063; P value: .300; Sig: 0.063

The above mentioned table indicates the chi square test results to check the relationship between two variable high salary package and try for immigration. Chi square value 14.801a which is higher than the DF value 8 which is highly significant at 0.063 values. Therefore, the existing hypothesis entitled “There is a significant influence of high salary package is causing brain drain” is statistically accepted. The P value of co-efficient is .300 which shows a moderate relationship between these two variables.

5. CONCLUSION & RECOMMENDATIONS

Pakistan is a developing country and subsequently facing the increasing trend of highly qualified and highly skilled professional in the form of brain drain. Present study assessed the 150 business and I.T graduate through Random sampling technique. Finding of the study explored that economic factors have a great influence causing brain drain and the variable high salary packages and better employment opportunities in overseas countries are attracting the professional and graduate towards the developed countries.

Similarly, in political factors the results of the variable “stable political system” and “better law & order situation” were found were significant. In terms of the social factors the variable “better opportunity for family and children future” has a great influence causing brain drain among graduate professional of Pakistan.

In terms of demographic characteristics of the respondents it is explored that variable gender differences and marital status don’t have any significant influence on causing brain drain. However, there is a difference of perception of respondents who have relatives or family members and friends live in abroad and those respondents who don’t have relatives or family members live in abroad. There is also difference of perception about influencing factors of brain drain among the Business and I.T graduates and those respondents who have tried for immigration. It is the dire need of the time that government and policy makers should take necessary measures to combat the influencing factors of brain drain among the graduate professionals. It should be the prime responsibility of the government to improve the Economic, political and social indicators of the country. Government should create better employment opportunities; jobs according to their professional degrees and qualification, salary packages should be increased to improve their economic status.

6. FUTURE RESEARCH

Future research should be conducted on the perception of other graduate professionals of Pakistan about influencing factors of brain drain. Additionally, research should be conducting that how to convert brain drain into phenomenon of brain gain.

References

World Bank, brain drain in developing countries, (2000)
 Binod Khadria, “The Brain Drain from Developing Countries: Analysis of Impact and Policy Issues”, International Migration Paper”, “Skilled Labour Migration”, 2002
 Malik Fahem Bashir “Key Factors Determining the Rational for Brain Drain; An Irony Never Recovered, 2000
 Muhammad Aamir Hashmi, Ashi Zeeshan, Tariq Mehmood, Syed Abir Hussain Naqvi, Faiz M. Sheikh, “factors driving brain drain in pakistan: an exploratory view”, Journal Of Asian Business Strategy, Vol 2 No 2, 2012 Pp.

- Aubert,C. & Xiande.L, “Domestic Unemployment And Migration”, “Journal Of Domestic Unemployment”, (2002) Vol.47
- Gillani,I. & Malik, “Pakistan infrastructure implement capacity assessment”, Report no. 43186, Discussion Paper Series: technical note 2, (South Asia Sustainable Development Unit, 2007”.
- M. Carolina Brandi, “Skilled Immigration in Rome”, International Migration, (2001), Vol. 39(4)
- Herbert G Grubel, Anthony Scott, “The brain drain: determinants measurement and welfare effects”, Canadian journal of economics, 1978, vol 11 no 3
- Jagdish Bhagwati, “The Brain Drain International Integration Of Markets For Professional And Unemployment: A Theoretical Analysis”, Journal Of The Economoics, (1974), 1, 19-24
- Hashmi,A,M. Zeeshan,A, Mehmood,T. Naqvi,H,A,S. & M,Shiekh. (2012), “factors driving brain drain in pakistan: journal of asian business strategy, Vol. 2, pp. 7-20
- Said Ouaked, “Translantic roundtable on high skilled migration and sending countries issues”, International Migration, 2002, Vol 40 No 4, 155
- Barry McCormick, Jackline Wahba, Overseas employment and remittances to a dual economy, The Economic Journal, 2000, 509- 34
- Gallup Pakistan Press Release (878) - In Logical Order “Annual Hope and despair/ Optimistic And Pessimistic Index For Pakistan 2000-2009”.
- Faroq Azam, “New Frontiers Of Social Policy”,“Journal Of Public Policy To Supply International Migration In Pak 2005 – Pp 72-95