

## **CHAPTER-VI**

### **CAUSES OF MIGRATION OF SKILLED HUMAN RESOURCES FROM INDIAN *IT* SECTOR--DATA ANALYSIS, DISCUSSION AND FINDINGS**

- SCENARIO OF INDIAN *IT* PROFESSIONALS IN USA
- CAUSES OF USA BEING AN ATTRACTIVE DESTINATION TO INDIAN *IT* PROFESSIONALS
- MAJOR REASONS FOR MIGRATION OF INDIAN *IT* PROFESSIONALS
- PREFERENCES OF MIGRATED *IT* PROFESSIONALS
- SKILLS OF MIGRATED *IT* PROFESSIONALS -HAPPY OR NOT?
- FRACTION OF SALARY SENT BY THE MIGRANTS TO THEIR HOMES IN INDIA
- JOB SATISFACTION OF THE MIGRANTS
- THE RELATIONSHIP BETWEEN JOB SATISFACTION AND MENTAL SATISFACTION
- HYPOTHESES TESTING AND FINDINGS

## **CAUSES OF MIGRATION OF SKILLED HUMAN RESOURCES FROM INDIAN *IT* SECTOR AND THE INFLUENCING FACTORS OF GLOBALISATION**

### **6.1: Introduction**

Skilled migration has become an extremely important form of migration in the modern world. Various globally important countries like the USA, Canada, Australia, New Zealand, UK (Quaked, 2002) etc. have opened up immigration for the highly skilled professionals and the main criterion of selection of the migrants is their skills. Since the liberalization of Indian economy and particularly between 1999 and 2001(Hira, 2004), India has become one of the powerful sources for skilled human resource migration. The migration from India increased due to increase in highly skilled professionals in Indian *IT* sector. Towards the end of 1990, there was a large increment in the number of work permits issued to the *IT* sector from India and this was in response to the hike in the global demand of skilled human resources. However to the best of knowledge, despite this consistent rise in the migration, till date very few studies have focused on the specific issues related to *IT* migrants.

Globally, India has become a dominant supplier of IT professionals to various countries like USA, Germany, Australia, Gulf, New Zealand, UK etc. The German Green Card, the American H1-B visa, the British work permit, the Canadian investment visa, the Australian student visa, the New Zealand citizenship, all are encouraging to acquire Indian talents including skilled professionals. The Indian IT professionals who go to different parts of the world, 90 percent of them go to the USA only. According to the agreement between the USA Govt and WTO and the ‘Agreement of Uruguay’, the US Govt. is bound to issue minimum 65000 H-1B visas for foreign skilled professionals every year. The H-1B and L-1 visas are the temporary visas given to the skilled professionals from foreign countries for temporary immigration to USA. Due to the demands of skilled professionals in the US companies the Govt. of USA had issued approximately 3, 00,000 H-1B visas in 2007-2008 (Bureau of Citizenship and Immigration Services, USA Govt.). Basically the demands of H-1B & L-1 visas come from the IT industries. The IT companies of USA have always demanded the number of H-1B visas should be increased for the Indian IT professionals. Because Indian IT professionals are

skilled, bright, good English speakers and above all cheaper than their USA counterparts. The cost to company (CTC) of an Indian IT professionals in USA is \$60000-70000 per annum, whereas for an American the CTC is near about \$100000. Most of the H-1B visas and L-1 visas are availed by Indian IT professionals. Approximately 50 percent of those visas are availed by Indian IT professionals (Bibek Debray, Anandabazar Patrika, 28<sup>th</sup> May, 2009). Indians IT professionals are in great demand in US companies. Approximately 10 lacks Indian have stayed in the USA. Those who have got ‘Green Card’ became the permanent residents of the USA but those who have got only H-1B visas and L-1 visas will be facing some problems in future due to new immigration policies taken by Obama Govt. regarding H-1B visas due to recent economic recession. Approximately 90,000 Indian students who are doing higher studies in the USA will work in the USA after completion of their studies and will face problems due to new law. Indian IT professionals are the pioneers in the development of software Industries in the USA. The Indian IT professionals have great contributions in setting up of establishments like Google, Intel, e-Bay, Yahoo etc. in the USA. Approximately 1, 63,000 H1B visas were offered to IT specialists from India during 2007-2008 (Bureau of Citizenship and Immigration Services, USA Govt.). The demands of H-1B and L-1 visas are very high for the multinational software houses which have their offices both in India and the USA. In the year of 2008 there were demands of 85000 H-1B visas by the Indian IT professionals. In 2001, India was the largest source of H-1B petitions. Out of the 331,206 H-1B petitions approved by BCIS (Bureau of Citizenship and Immigration Services, USA Govt.) in 2001, 161,561 or 49 percent went to Indian nationals. The next closest country was China, with 27,331, or 8 percent, approved petitions. Almost all, precisely 92 percent, of the petitions for Indian workers were for computer-related or engineering occupations. It is clear that employers of Indian nationals with *IT* skills are the heaviest users of the H-1B visa. In the year of 2009 during the recession the US Govt. has passed a bill to provide limited number of H-1B visas to software professionals. In 2009 the number has decreased to around 45,000. According to data released by the US Citizenship and Immigration Services (USCIS), Infosys tops the list with as many as 4,559 visas, followed by Wipro with 2,678, Satyam 1,917, TCS 1,539, Cognizant 467, L&T 403 and IBM India got 381 H1B visas. Microsoft, the US Company with 1,037 H1B visas issued, ranked fifth in the list. Among other US companies, Google got 248 visas, while Lehman Brothers received 130 visas. The H1B visa has been designed for US corporations to

remain competitive in the world market. In the times when the US is experiencing recession, there has been a general animosity against the H1B visas in America. Recently a statistics is published by USCIS(Rediffmail.com, May 20, 2009)that nearly 20,000 slots open seven weeks after the US Citizenship and Immigration Services (USCIS) started receiving applications for the financial year 2010 beginning October 2009.The USCIS said it has so far received approximately 45,500 H-1B petitions counting toward the Congressionally-mandated 65,000 cap. USCIS said it has received approximately 20,000 petitions for the advanced degrees category. However, it would continue to accept advanced degree petitions since experience has shown that not all petitions received are approvable, the USCIS said in a statement. The Congress mandated that the first 20,000 of these types of petitions are exempt from any fiscal year cap on available H-1B visas. For the fiscal year 2010, the USCIS is already started receiving H-1B petitions from April 1, 2009. In the first five working days, it received 42,000 H-1B petitions. In the month and half since then, USCIS has received just 3,500 more H-1B petitions, indicating the slump in demand for H-1B work visas.

The growing competition among themselves have necessitated the countries like the US, the UK, Canada, Australia, New Zealand, Ireland, and Singapore, as well as non-English speaking countries like France, Germany, Netherlands and South Asian countries to look for the cream of Indian professionals. Data collated by the US Institute of International Education's *Open Doors 2005* survey revealed that in 2004–05 India retained its No. 1 position in the US university enrolment (followed by China, Korea, Japan, Canada, and Taiwan) for the fourth year in a row.

The *IT* professionals are in a huge demand in the developed countries .The German Green Card, the American H1-B visa, the British work permit, the Canadian investment visa, the Australian student visa, the New Zealand citizenship, all are encouraging to acquire Indian talents including skilled professionals as well as students. A new destination, that rapidly gained popularity, has been the Middle East. Some south-east countries like Malaysia became such destination later on.

## **6.2: Scenario of Indian *IT* Professionals in the USA**

Almost 90 percent of Indian skilled human resources move to the USA every year. Globally, India has become a powerful supplier of *IT* professionals and about 1, 63,000 H-1B visas were offered to *IT* specialists from India to USA in recent years (2007-2008). Before 2001, UK was the best option for migration for the Indian *IT* professionals. But after 2001 USA has become first preference (Hira, 2004) of the *IT* professionals for migration destination. In 2000, 19.7 percent of work permits granted by the UK went to the computer industry, which was the six times bigger than the numbers in between 1995 and 2000. In the year of 2008 near about 85000 H-1B visas were available for the Indian professionals according to the US Citizenship & Immigration Service (USCIS).

Information Technology (*IT*) industries can be an important source of economic growth and development for developing countries. The Indian software industry, which has been successful at exporting *IT* services, is the exemplar for developing countries. NASSCOM, the Indian software services industry association, estimates that the Indian *IT* industry has grown nearly eightfold from 1994 to 2001, with revenues in 2001 of approximately US\$13.5 billion and 2.87 percent share of India's GDP. At the end of 2006, more than 1 million skilled professionals (IT engineers, scientists, doctors, researchers) and their families were in line for a yearly allotment of only 120,000 permanent resident visas to the USA. Many Central and Eastern European countries have similar pools of technically competent workers, and they liberalized their economies at approximately the same time as India did. Therefore, why has India been so successful than other countries, such as Romania or Russia? There are many explanations for India's recent success in *IT*. The most important reason is India's economic liberalization after 1991. Then intellectual mindset of Indian students, technically trained workers who are willing to work for low wages in foreign countries, good English skills. These are the reasons for what India has become a superpower in the field of Information Technology. The number of *IT* professionals who migrate from India every year can be obtained from the statistics provided by Department of Labour, Govt. of India. For getting migration to the US, H-1B visa is required. A study on H-1B visa will easily throw a light on migration scenario of Indian *IT* professionals every year.

### **6.3: H-1B and L-1 visa for migration of Indian *IT* Professionals**

Occupation like *IT* profession is a highly skilled profession, which requires theoretical and practical application of highly specialized knowledge and skills. It also requires a bachelor's degree from a recognized University. The H-1B visa has been the category of visa, which is most closely linked to the *IT* industry. The United States employs a variety of visa categories to admit foreigners for business, pleasure, study, work, or immigration. H-1B (Hira, 2004) is a temporary worker visa issued to employers to hire specialized occupation workers. From fiscal years 1991–1998 the maximum number of new H-1B visas had touched to 65,000. For 1999 and 2000, it was raised to 115,000 and for FY 2001–2003, it was raised to 195,000. For 2004, it again reverted to 65,000.

**Table 6.1: Top 5 H-1B occupations shift between 1995 and 1998**

1995		1998	
Top 5 occupations	Percent of H-1Bs (%)	Top 5 occupations	Percent of H-1Bs (%)
Therapists	54	Computer specialists	57
Computer specialists	25	Therapists	14
University faculty	2	Accountants	7
Physicians	2	Electrical engineers	3
Accountants	2	Architects	2

(Source: US Dept. of Labour, 2004)

Table 6.1 shows the comparisons of occupational mix of H-1B beneficiaries between 1995 and 1998. It is clear from the above table that *IT* has become the first preference in recent days H-1B beneficiaries after 1998.

**Table 6.2: Top H-1B petitioners, Oct.1999-Feb.2000**

Rank	Company	Rank	Company
1	Motorola	9	Wipro
2	Oracle	10	Tata Consultancy Service
3	Cisco Systems	11	Price Waterhouse Coopers
4	Mastech	12	People Com Consultants
5	Intel	13	Lucent Technologies
6	Microsoft	14	Infosys
7	Rapidigm	15	Nortel Networks
8	Syntel	16	Tekedge

(Source: US Dept. of Labour, 2004)

Table 6.2 displays the names of the 16 employers/companies requesting H-1B visa for Indian IT professionals. There are a few large employers on the list such as Oracle, Lucent, and Motorola, but the list also includes software body shops such as Tata Consultancy Services (TCS) and Mastech. TCS is an Indian-based *IT* firm that was one of the first to penetrate the U.S. market.

By 2001, India was, by far, the largest source of H-1B petitions. Out of the 331,206 H-1B petitions approved by BCIS (Bureau of Citizenship and Immigration Services, USA Govt.) in 2001, 161,561 or 49 percent went to Indian nationals. The next closest country was China, with 27,331, or 8 percent, approved petitions. Almost all, precisely 92 percent, of the petitions for Indian workers were for computer-related or engineering occupations. It is clear that employers of Indian nationals with *IT* skills are the heaviest users of the H-1B visa.

On the other hand L-1 is an intra company transfer visa used by multinational companies to move employees to the United States for temporary assignments. The employees are required to be executives, managers, or in other positions that require specialized knowledge like a Project Manager of a software developing farm. Executives and managers are able to stay up to seven years, while specialized knowledge workers can stay up to five. There is no annual number for L-1 visas and no prevailing wage requirement. These features may make the L-1 more attractive than the H-1B. Some Indian IT firms have increased their use of the L-1 more rapidly than the H-1B.

#### **6.4: Uses of H-1B and L-1 visas by Indian IT firms**

By the end of 2002, at the peak time of NASDAQ, Infosys had 2884 employees on temporary visas in the United States, a 200 percent increase from March 2000. H-1B and L-1 workers represented approximately 21 percent (NASSCOM, 2003) of Infosys' worldwide workforce.

The BCIS tracked the leading H-1B petitioners for a short window from October 1999 to February 2000, and the top 5 firms are shown in Table-6.3. Three of the top Indian *IT* firms, namely TCS, Wipro, and Infosys, are among the top H-1B petitioners (PTI, 2003). Not only do the Indian *IT* firms use a large number of H-1B and L-1 visas, but they are also among the leaders in H-1B petitions.

**Table 6.3: LCA requested by leading IT firms in 2001**

Company	Number of employees requested on LCAs	Total LCA wages to be paid (US \$ millions)	Average wages paid per position per year (US\$)
Wipro	3120	158	50,648
HCL	3828	147	38,428
Satyam	8692	483	55,621
Tata	11,982	437	36,502
Infosys	12,211	657	53,880
Totals	39,833	1884	47,294

(LCA=Labour condition application)

(Source: US Dept Of Labour, 2004)

#### **6.5: Causes of USA being an attractive destination to Indian *IT* professionals**

Labour cost is a major driver in winning business in the *IT* market, and, if H-1Bs are a cheaper alternative compared to American workers, then, those companies utilising the H-1B will have a competitive advantage. Typically, for a TCS employee with five years experience who is migrated, the annual cost to the American company is \$60,000–70,000, while a local American employee might cost \$80,000–100,000. This (labour arbitrage) is a fact of doing work onsite.

Why would an Indian H-1B worker accept a lower salary than that of a comparably skilled American? Salaries for *IT* workers in India are significantly lower than in the United States and thus, the salary expectations of Indian workers are lower. Instead of getting low salary in America, Indian *IT* professionals want to stay back there for non-monitory benefits and possibility of getting permanent immigration in USA. While the cost of living in the United States is higher than in India, the H-1B's perception of his or

her net pay is influenced by the substantial differences in purchasing power parity (PPP), an international cost of living index, between the United States and India. The World Bank has calculated a PPP of approximately 0.2 between India and the United States, which means that US\$10,000 in India has the same purchasing power as US\$50,000 in the United States. This PPP differential amplifies any savings by the Indian H-1B workers.

## **6.6: Data Analysis**

With the help of the data obtained through the questionnaire, an effort has been made to illuminate the following:

1. Major reasons for migration of Indian *IT* professionals.
2. Preferences of migrated *IT* professionals.
3. Importance of role played by some decision makers in compelling the migrants to take migration decision.
4. Present skills of migrated *IT* professionals.
5. Fraction of salary sent by the migrants to their homes in India.
6. Job satisfaction of the migrants.
7. Age distribution of the migrants.
8. Academic background of the migrants.
9. Work experience of the migrants.
10. The relationship between job satisfaction and mental satisfaction of the migrants.
11. Factors influencing the relative job satisfaction of the Indian migrants in the foreign country with respect to home country.

## **6.7: Major Reasons for Migration of Indian IT Professionals**

After 1991 when globalisation took place in the Indian economy the scenario of migration of IT professionals to USA and other countries has been changed. After 1991 the issue of H-1B visa for the Indian IT professionals has increased extensively. Under the condition of globalisation and the condition of ILO some factors have become very crucial for migration decisions for the skilled professionals. The working infrastructure, salary structure, cost of living, Quality of Work Life (QWL), opportunity of utilizing skills etc have infact become crucial factors. These factors have become influential in migration decisions of the IT professionals.

Out of the questions asked in the questionnaire, there was one question in which the respondents were asked to give scores on the influences of some factors (in a scale of ten) in causing their migration. The averages of the scores of all the respondents have been obtained for each of the factors and are displayed in the Table-6.4. The factors are ranked according to their mean score.

**Table 6.4: Major reasons for migration of Indian *IT* professionals**

<b>FACTORS (influencing migration)</b>	<b>MEAN SCORE (OUT OF 10)</b>	<b>STD DEV.</b>	<b>RANK</b>
<i>Improved Infrastructure</i>	7.97	1.08	1
<i>Better Working Environment</i>	7.67	1.09	2
<i>Salary</i>	7.65	1.29	3
<i>Political Turmoil</i>	7.59	1.62	4
<i>Better Opportunity Of Utilising Your Skill</i>	7.07	1.91	5
<i>Quality Of Work Life</i>	7.07	1.09	5
<i>Achievement</i>	6.46	1.00	7
<i>Recognition</i>	6.43	0.84	8
<i>Research Environment</i>	6.14	1.05	9
<i>Indian Social Security</i>	5.31	1.38	10
<i>Cost Of Living In Your Present Country</i>	5.29	1.95	11
<i>Cost Of Living In India</i>	4.14	1.30	12

(Source: Computed from Data Collected from the Respondents)

From Table 6.4 it can be witnessed that out of these 12 factors the main factor influencing migration from India to other countries and staying there is '*Improved Infrastructure*' in foreign countries. *Improved infrastructure* obviously implies the job infrastructure in foreign countries like technological infrastructure, management support, job design, job responsibility etc. '*Better Working Environment*' gets the 2<sup>nd</sup> rank. Better working environment comprises of cozy working environment, less politics at the work place, recognition of work etc. '*Salary*' is found to be the 3<sup>rd</sup> influential factor for migration. '*Political Turmoil*' in India is ranked 4<sup>th</sup> for migration. The migrated *IT* professionals feel that political turmoil in India is not good for doing job in India. '*Better opportunity of utilizing skill*' and '*Quality of Work Life*' in foreign countries are jointly ranked 5<sup>th</sup> as the factors influencing the migration. '*Cost Of Living in India*' and '*Cost Of Living in Foreign Countries*' are the two least influential factors for migration.

#### **6.8: Preferences of migrated *IT* professionals**

One question was asked in which the respondents had to give scores (in a scale of ten), which would reveal their preferences towards movies, foods, culture and work culture. The responses obtained are shown in Table-6.5. The factors are ranked according to their mean score.

**Table 6.5: Preferences of migrated *IT* professionals**

FACTORS	MEAN SCORE (OUT OF 10)	STD DEV.	RANK
<i>Indian Food</i>	9.02	0.85	1
<i>Hindi Movie</i>	8.51	1.10	2
<i>Present Country's Work Culture</i>	8.49	0.68	3
<i>Indian Social Culture</i>	7.68	0.92	4
<i>Indian Work Culture</i>	6.52	0.86	5
<i>Present Country's Social Culture</i>	6.46	1.45	6
<i>English Movie</i>	5.68	0.97	7
<i>European Food</i>	5.47	1.18	8
<i>American Food</i>	5.10	1.30	9
<i>Chinese Food</i>	4.98	1.38	10
<i>Regional Movie</i>	3.48	1.50	11

(Source: Computed from Data Collected from the Respondents)

Table-6.5 shows the preferences of the migrated Indian *IT* professionals for different factors like different food habits, cultures and entertainments etc. They might have migrated to other countries but their liking towards *Indian Food* is much more than *Foreign Food*. Their greater affinity for '*Hindi movies*' compared to '*English/ Regional Movies*' and greater affinity for '*Indian Social Culture*' compared to '*Present Countries Social Culture*' are also evident. However, a striking revelation is that, as far as the *Work Culture* is concerned, the migrants prefer their present countries (i.e. foreign countries) more than India.

### **6.9: Factors Influencing Migration Decision**

Table 6.6 summarises the responses obtained from the migrants regarding the importance of the role played by different decision makers in their migration decision. The averages of the scores of all the respondents have been obtained for each of the factors.

**Table 6.6: Importance of role played by some decision makers in compelling the migrants to take migration decision**

FACTORS	MEAN SCORE (OUT OF 10)	STD DEV.	RANK
<b>Ownself</b>	7.48	0.95	1
<i>Previous Job Environment</i>	7.23	0.96	2
<i>Present Employer</i>	6.36	1.41	3
<i>Family</i>	5.33	1.91	4
<i>Previous Employer</i>	3.61	1.02	5
<i>Friends In Present Country</i>	3.18	1.79	6
<i>Friends In India</i>	1.93	1.02	7
<i>Teachers</i>	1.63	1.53	8

(Source: Computed from Data Collected from the Respondents)

Table 6.6 reveals the migrated *IT* professionals consider themselves (ie. '*Ownself*') coupled with their '*Previous Indian Job Environment*' to be the main driving forces in taking the decision of migration. To some extent, their *Present Employer* (i.e. the employer in the foreign country) and their *Families* also played a considerable role in this regard. Other factors shown in the table have not played any significant role in encouraging the migrants to leave India.

## 6.10: Skills of migrated *IT* professionals, their Job Satisfaction and related matters

With the objective of developing an idea about the major skills of the migrated *IT* professionals one question was asked against which the respondents had to rate each of their different skills (i.e. managerial, developer, consultancy, customer care etc.) in a scale of ten. For each skill the averages of the scores obtained from different respondents have been calculated and displayed in Table 6.7.

**Table-6.7: Skills of migrated *IT* professionals**

SKILLS	MEAN SCORE (OUT OF 10)	RANK
<i>Managerial</i>	7.27	2
<i>Developer</i>	4.55	5
<i>Maintenance</i>	4.68	4
<i>Consultancy</i>	7.59	1
<i>Customer Care</i>	4.9	3

(Source: Computed from Data Collected from the Respondents)

From Table-6.7 we see the respondents are handling all the responsibilities from '*Consultancy*' to '*Software Development*' as per the job design. However, according to the respondents their main skills are '*Consultancy*' and '*Managerial Skills*'. As is well known, the managerial skills and consultancy skills are mainly associated with professionals working in the upper level of the hierarchy. This is in consistency with the result obtained (displayed in Table-6.12) which shows that more than 50 percent of the migrated professionals have substantial experience and are hence expected to work in the upper level of the hierarchy.

Remittances sent, job satisfaction, age distribution of the migrants, their academic backgrounds and work experience are shown respectively in tables 6.8, 6.9, 6.10, 6.11 and 6.12.

**Table 6.8: Remittances sent by the migrants to their home in India**

FRACTION OF SALARY THE MIGRANTS SEND HOME	NO. OF RESPONDENTS	PERCENTAGE
<i>Zero</i>	0	0
<i>One Fourth</i>	34	23.1
<i>Half</i>	112	76.9
<i>Three Fourth</i>	0	0

(Source: Computed from Data Collected from the Respondents)

From Table 6.8 we see that 76.9 percent of the 146 respondents send half of their salaries to their homes in India.

**Table 6.9: Job satisfaction of the migrants**

JOB SATISFACTION	MEAN SCORE (OUT OF 10)	STD. DEV.
<i>Present Job Satisfaction</i>	8.44	1.06
<i>Job Satisfaction Before Leaving India</i>	5.94	1.49

(Source: Computed from Data Collected from the Respondents)

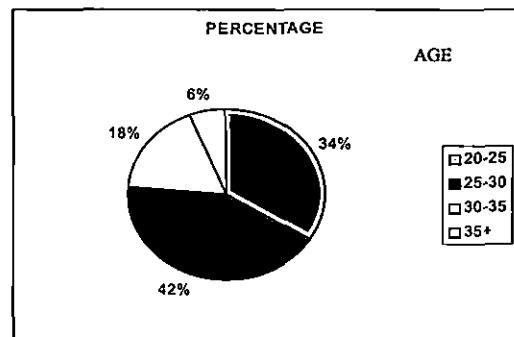
From Table-6.9 it is seen that the '*Present Job Satisfaction*' of the *IT* professionals is higher than the '*Job Satisfaction before Leaving India*'.

The table below displays the percentages of migrants who fall in each of the different age groups.

**Table 6.10: Age distribution**

AGE (in years)	PERCENTAGE
20-25	34%
25-30	42%
30-35	18%
35+	6%

(Source: Computed from Data collected)



**Fig: 6.1 Age distribution of the migrants**

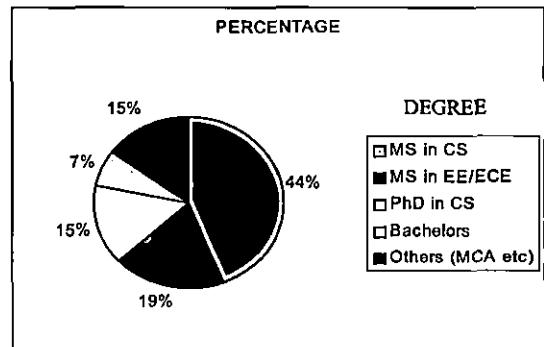
From Table 6.10 it is evident that the age group of 25-30 is having the highest frequency among the 147 respondents.

Table-6.11 displays the percentages of migrants who possess each of the different academic degrees mentioned.

**Table 6.11: Academic background**

DEGREE	PERCENTAGE
MS in CS	44%
MS in EE/ECE	19%
PhD in CS	15%
Bachelors	7%
Others (MCA etc)	15%

(Source: Computed from Data collected)



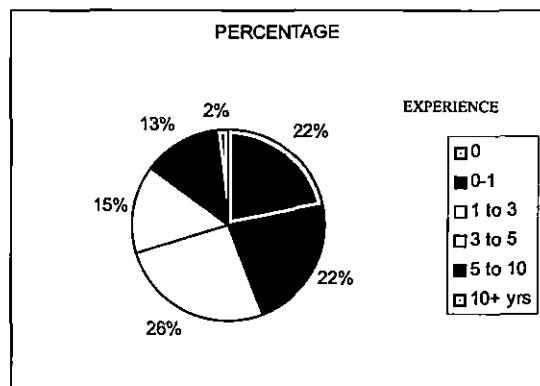
**Fig: 6.2 Academic background of the migrants**

From Table 6.11 we can see that most respondents are having the degree MS in Computer Science. A good number of IT professionals are having PhD in computer science.

**Table 6.12: Work experience**

YEARS OF WORK EXPERIENCE	PERCENTAGE
0	22%
0-1	22%
1 to 3	26%
3 to 5	15%
5 to 10	13%
10+ yrs	2%

(Source: Computed from Data collected)



**Fig 6.3 Work experience of the migrants**

From Table 6.12 it is seen that out of 147 IT professionals, 26 percent are having 1 to 3 years work experience, 15 percent are having 3 to 5 years work experience and 13 percent are having 5 to 10 years experience.

#### **6.11: The relationship between job satisfaction and mental satisfaction**

A simple correlation coefficient between the scores given by the respondents on '*Present Job Satisfaction*' and scores given on '*Mental Satisfaction*' has been found out. The value of the said correlation coefficient is  $-0.091$ , which is insignificant at 5 percent level of significance (P value is 0.27). That means the job satisfaction of the migrants who are working in foreign countries have no relation with their mental satisfaction. This implies that the mental satisfaction of the migrants is determined not by the standard and type of job that they are doing. Probably the fact that these migrants staying in a foreign country feel out of nostalgia, that they are missing some of the basic cultures, properties and traits of their mother nation. This is also proved by the filled up questionnaires where most of the respondents have shown their interest to return back to their homeland. This give rise to the scope for carrying out further research works to find out the major determinants of '*Mental Satisfaction*' of migrated Indian IT professionals.

## **6.12: Hypotheses Testing and Findings**

### **6.12.1: Factors influencing the relative job satisfaction of the Indian IT migrants in the foreign country with respect to home country:**

In this section we want to assess the reasons for skilled human resource migration from Indian IT sector and impacts of different factors due to globalisation. The study has attempted to assess the trends in and potential demands for trained human resources from Indian IT sector to all over the world.

Globalisation has a strong impact on transnational differentials in wages, social benefits, skills, infrastructure, quality of work life, cost of living etc. (Tomer Broude, International Law Forum of the Hebrew University of Jerusalem Law Faculty, Research Paper, 2007). The labour migration is strongly associated with these variables. Due to globalisation a rapid development has been seen in the environmental, social and infrastructural areas in software sectors worldwide.

The specific research questions related to these variables are addressed by the study with special reference to Indian IT sectors are as follows.

1. The migration of IT professionals is influenced by the combination of the variables like *salary, achievement, cost of living in India, better opportunity of utilizing skill, better working environment, political turmoil etc.*
2. The migration of IT professionals is influenced by salary in the foreign countries.
3. The migration of IT professionals is influenced by *achievement of work* in the foreign countries.
4. The migration of IT professionals is influenced by *cost of living in India.*
5. The migration of IT professionals is influenced by *better opportunity of utilizing skill* in the foreign countries

6. The migration of IT professionals is influenced by *better working environment* in the foreign countries.

7. The migration of IT professionals is influenced by *political turmoil in India*.

8. Significant difference in the *Present job satisfaction* of the IT professionals and their *job satisfaction before leaving India*

The respondents were asked to express their present job satisfaction in the foreign country, as well as their job satisfaction before leaving India, each in scale of ten. The scores obtained for present job satisfaction is expressed as a percentage of scores obtained for job satisfaction before leaving India. This percentage (say variable *J*) may be treated as an indicator of the impact of migration on job satisfaction. The respondents were also asked to rate different factors according to their influences in causing migration in scales of ten. Then a multiple regression equation of '*J*' on different independent variables each representing the influences of different factors in causing migration is obtained with the help of SPSS. The different independent variables are as follows:

‘The influence of *salary* in causing migration’- VAR 00002.

‘The influence of *achievement* in causing migration’- VAR 00003.

‘The influence of *cost of living in India* in causing migration’- VAR 00004.

‘The influence of *better opportunity of utilizing skill* in causing migration’- VAR 00005.

‘The influence of *better working environment* in causing migration’- VAR 00006.

‘The influence of *political turmoil* in India in causing migration’- VAR 00007.

The results obtained as output of SPSS has been displayed in Table- 6.13 and Table-6.14.

Table 6.13 reveals that the multiple correlation coefficient between  $J$  (VAR00001) and the above mentioned independent variables(i.e. from VAR00002 to VAR00007) is found out to be  $R_{1,234567}=0.342$  and the corresponding significant F is .007. This implies that the multiple correlation is significant at 1 percent level. However the coefficient of determination (i.e. the fraction of the total variation in  $J$  which is explained by the regression line) is given by  $R^2=0.117$ . This indicates that in addition to the variables considered by us there are other variables which affect the relative job satisfaction of the migrants.

From Table 6.14 it is observed that out of the variables considered by us, only 2 variables are having significant partial correlations (Level of significance being 5 percent) with  $J$ . The partial correlation coefficient between  $J$  and salary as the influencing factor is -0.178, which is significant at 5 percent level of significance. Also the partial correlation coefficient between  $J$  and better working environment is 0.215 which is significant at 1 percent level of significance. This throws light on an interesting implication like:

Those individuals who have been influenced more by salary to leave India and migrate to other countries are less satisfied with their jobs in the foreign country (since the partial correlation is negative). On the other hand those individuals whose migrations have been influenced more by their search of better working environment are more satisfied with their jobs in foreign countries.

**Table 6.13: SPSS output**

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
Model					R Square Change	F Change	df1	df2	Sig. F Change
1	.342	.117	.079	40.9078	.117	3.096	6	140	.007

Predictors: (Constant), VAR00007, VAR00006, VAR00004, VAR00005, VAR00002, VAR00003

(Source: Computed from Data collected from Respondents)

**Table 6.14: Table of coefficients**

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
Model		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	48.694	45.846		1.062	.290			
	VAR00002	-5.678	2.648	-.172 -2.144		.034	-.167	-.178	-.170
	VAR00003	4.877	3.430	.115	1.422	.157	.071	.119	.113
	VAR00004	4.534	2.605	.139	1.740	.084	.138	.146	.138
	VAR00005	2.382	1.778	.107	1.340	.183	.100	.112	.106
	VAR00006	8.067	3.095	.208	2.606	.010	.214	.215	.207
	VAR00007	2.332	2.121	.089	1.099	.273	.068	.093	.087

Dependent Variable: VAR00001

(Source: Computed from Data collected from Respondents)

### 6.12.2: Testing of Hypotheses from SPSS Tables 6.13 and 6.14

Table 6.13 reveals that the multiple correlation coefficient between  $J$  (VAR00001) and the above mentioned independent variables (i.e. from VAR00002 to VAR00007) is found out to be  $R_{1,234567}=0.342$  and the corresponding significant F is .007. This implies that the multiple correlation is significant at 1 percent level which states that the hypothesis- $H_01$  is rejected.

**That is there is a correlation between migration of IT professionals and the combination of these variables i.e. salary, achievement, cost of living in India, better opportunity of utilizing skill, better working environment, political turmoil.**

It implies that the above said factors have influences on migration of IT professionals.

From Table 6.14 we can consider that for hypothesis  $H_{02}$ , B –co-efficient of *salary* (VAR00002) is -0.172 and the partial correlation between *migration* and *salary* is -0.178 I.e. at 5 percent level of significance the calculated value of B-co-efficient is  $(100\%-3.4\%)=96.6\%$  which is greater than 95%. So the hypothesis is rejected.

**This means that migration of IT professionals is correlated with salary in the foreign countries.**

For hypothesis  $H_{03}$ , B –co-efficient of *achievement of work* (VAR00003) is .115 and the partial correlation between *migration* and *achievement of work* is .119 I.e. at 5 percent level of significance the calculated value of B-co-efficient is  $(100\%-15.7\%)=84.3\%$  which is less than 95%. So the hypothesis is accepted.

**This means that migration of IT professionals is not correlated with *Achievement of work*.**

For hypothesis  $H_{04}$ , B –co-efficient of *cost of living* in India (VAR00004) is .139 and the partial correlation between *migration* and *cost of living* is 0.146 I.e. at 5 percent level of significance the calculated value of B-co-efficient is  $(100\%-8.4\%)=91.6\%$  which is less than 95%. So the hypothesis is accepted.

**This means that migration of IT professionals is not correlated with *cost of living in India*.**

For hypothesis  $H_{05}$ , B –co-efficient of *better opportunity of utilizing skill* (VAR00005) is .107 and the partial correlation between *migration* and *better opportunity of utilizing Skill* is 0.112 I.e. at 5 percent level of significance the calculated value of B-co-efficient is  $(100\%-18.3\%)=81.7\%$  which is less than 95%. So the hypothesis is accepted.

**This means that migration of IT professionals is not correlated with better opportunity of utilizing skill**

For hypothesis H<sub>06</sub>, B –co-efficient of *better working environment* (VAR00006) is -0.208 and the partial correlation between *migration* and *better working environment* is 0.215 I.e. at 5 percent level of significance the calculated value of B-co-efficient is (100%-1%)=99 % which is greater than 95%. So the hypothesis is rejected.

**This means that migration of IT professionals is correlated with better working environment in the foreign countries.**

For hypothesis H<sub>07</sub>, B –co-efficient of *Political Turmoil* in India (VAR00007) is .089 and the partial correlation between *Migration* and *Political Turmoil* of work is .093 I.e. at 5% level of significance the calculated value of B-co-efficient is (100%-27.3%)=72.7% which is less than 95%. So the hypothesis is accepted.

**This means that migration of IT professionals is not correlated with political turmoil in India**

For the hypothesis H<sub>08</sub>, a Z-test is done where the mean score ( $\mu_1$ ) and standard deviation ( $\sigma_1$ ) for *Present job satisfaction* are 8.44 and 1.06 and for *job satisfaction before leaving India* the mean score ( $\mu_2$ ) and standard deviation ( $\sigma_2$ ) were 5.94 and 1.49.

$$S.E = \sqrt{\sigma_1^2/n_1 + \sigma_2^2/n_2}$$

$$\text{Diff.} = \mu_1 - \mu_2$$

$$|Z| = \text{Diff.}/S.E$$

The Z value is obtained as 16.5.

Since at 5 percent level of significance the table value of Z is 1.96, so the calculated value (=16.5) of Z is becoming more than the tabulated value (=1.96). So the hypothesis  $H_{08}$  is rejected.

**This implies that there is significant difference in the *present job satisfaction* of the IT professionals and their *job satisfaction before leaving India***

The present job satisfaction of the IT professionals is much higher than the job satisfaction before leaving India.