



UNIVERSIDADE DE ÉVORA

Escola de Ciências Sociais

**Recent Trends of Indian Student Migration to the
European Union: Brain Drain or Brain Gain?**

Varsha Chawla

Orientação:

Isabel Maria Pereira Viegas Vieira

José Manuel Martins Caetano

Mestrado em Relações Internacionais e Estudos Europeus (código: 161)

Dissertação

Évora, Junho 2018



UNIVERSIDADE DE ÉVORA

Escola de Ciências Sociais

**Recent Trends of Indian Student Migration to the
European Union: Brain Drain or Brain Gain?**

Varsha Chawla

Orientação:

Isabel Maria Pereira Viegas Vieira

José Manuel Martins Caetano

Mestrado em Internacionais e Estudos Europeus (código: 161)

Dissertação

Évora, Junho 2018

Acknowledgement

The following study is undertaken as the outcome of a Master in International Relations and European Studies at the Universidade de Évora, Portugal. Firstly, I would like to express my sincere gratitude to my supervisors Prof Isabel Maria Pereira Viegas Vieira and Prof José Manuel Martins Caetano who gave me the opportunity to carry out this interesting study. I am thankful for their guidance and support that helped me to learn many new things during the course of this study. I would never be able to complete this dissertation without their perseverance and belief.

I would also like to thank my guide at Manipal University, India, Dr Neeta Inamdar for her continuous support. I was able to start this study thanks to her guidance and motivation. I am also thankful to Mr Sanjay Pawar and Mr Stefano Greco for their views, support and encouragement throughout this study.

I also acknowledge the support I received from the University of Évora, the Erasmus Mundus FUSION program, its coordinators at the University of Évora Prof. Teresa Gonçalves and Ms. Teresa Nogueiro; and the Department of European Studies, Manipal University that helped me to achieve my educational dreams. I wish to also thank my colleagues and friends for their encouragement and motivation during this period.

I am grateful to all the Indian students in India and the European Union, who responded to the questionnaires and helped me in achieving the objectives of this research. I also thank the Erasmus Student Network especially in this regard, for giving me access to student groups of various European universities that enabled me to contact more Indian students studying in the European Union. Without which, this dissertation would not have been successful.

Finally, I would like to thank my parents and my sister for supporting me morally throughout writing this thesis and my life in general.

Abstract

The European Union (EU) has maintained relations in key strategic areas with India since the 1960s. Education has played an important role in the diplomatic relations between India and the EU. Non-European student mobility to the countries of the EU has significantly increased in recent years and India has been a major source of student mobility to the EU leading to education becoming a service increasingly tradable. This dissertation focuses on student migration between India and the EU, contributing to improving the understanding of the recent trends of India-EU migration, mainly characterized by a shift in the Indian students' choices of the European destination for higher education; from a more traditional choice, the United Kingdom to a steadily rising preference for Germany and the factors influencing such choices. The study identifies the socio-economic factors determining the outflows from India and the inflows to the EU, attempting to ascertain whether Indian students return to India post completion of studies in the EU to look for further career prospects or prefer to settle in the host country in the EU and thus, if the current trends of student migration are leading to a short term brain gain in the EU but an overall reverse brain drain in India.

Key words: Student Migration, India, European Union, Brain Drain, Brain Gain

Tendências Recentes da Migração de Estudantes Indianos para a União Europeia: Fuga de Cérebros ou o seu Contrário?

Resumo

A União Europeia (UE) mantém desde a década de 60 do passado século ligações com a Índia em áreas chave, tendo a educação desempenhado um papel importante nas relações diplomáticas entre ambos. A mobilidade dos estudantes estrangeiros para os países da UE aumentou significativamente nos últimos anos, sendo a Índia um dos principais países de origem destes fluxos. Esta dissertação centra-se na migração de estudantes entre a Índia e a UE, contribuindo para melhorar a compreensão das tendências recentes na migração Índia-UE, caracterizada principalmente por uma mudança nas escolhas dos alunos indianos do destino europeu para o ensino superior, da escolha mais tradicional, Reino Unido, para uma crescente preferência pela Alemanha, e aos fatores que influenciam essas escolhas. O estudo identifica os fatores socio-económicos que determinam as saídas da Índia e as entradas para a UE, tentando verificar se os estudantes indianos retornam à Índia após a conclusão de estudos na EU, para procurar novas perspectivas de carreira, ou preferem estabelecer-se no país anfitrião e, portanto, se as tendências atuais da migração estudantil estão a traduzir-se em brain gain de curto prazo para a EU e a brain drain na Índia.

Palavras-chave: Migração estudantil, Índia, União Europeia, Fuga de cérebros, Ganho de cérebros

Table of Contents

Content	Page number
Chapter 1 - Introduction	5
Chapter 2 - Main Concepts, Theoretical Framework and Literature Review	9
Chapter 3 - Methodology, analysis of the results, and major findings	21
I - Methodology	21
II - Analysis	29
III - Major Findings	47
Chapter 4 - Conclusion	56
References	59
Annexes	64
Annex I: Survey year 2015	74
Annex II: Survey year 2016	98

List of Tables

Nr.	Table name	Page number
1	Sample Profile - Group 1	23
2	Sample Profile - Group 2	25
3.1	Indian student Migration to Non-EU countries (2015)	122
3.2	Indian student migration to EU member states (2015)	123
3.3	Indian student migration to EU Schengen countries (2015)	124
3.4	Indian student migration to Non-EU countries (2016)	124
3.5	Indian student migration to EU member states (2016)	126
3.6	Indian student migration to EU Schengen countries (2016)	127

List of Figures

Nr.	Figure name	Page number
A.1	Do you want to study abroad? (Group 1)	29
A.2	Do you currently have a plan to study abroad?	30
A.3	If Yes, which country are you planning to study in? (Group 1 Consolidated 15-16)	32
A.4	If No, in which country would you prefer to study? (Group 1 Consolidated 15-16)	32
A.5	Which country are you currently studying in? (Group 2 Consolidated 15-16)	33
A.6	Factors influential in deciding where and what to study	34
A.7	Would you return to India after completing your studies in the host country?	35
A.8	If yes, which of these are the factors that would influence your decision in returning to the India?	36
A.9	If No, which of these are the factors that would influence your decision to stay back in the host country?	36
A.10	After completing your studies, when are you likely to return to India?	37
A.11	After completion of your studies, would you look for job opportunities in the host country?	38
A.12	If you get a job after completing your studies, would you stay back in the host country?	38
A.13	If you get a job, when are you likely to return to India?	39

A.14	If you do not get a job after completing your studies, would you still stay back in the host country?	40
A.15	If you do not get a job, when are you likely to return to India?	41
A.16	If you get a job in the host country, would you still prefer to return to India?	42
A.17	Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?	42
A.18	Based on your educational qualifications/area of specialization, where do you see better job opportunities?	43
A.19	What does India lack that could be the main reasons for emigration of Indian students?	44
A.20	If all Indian educational degrees were internationally recognized, would you still want to study abroad?	45
A.21	If quality of education in India was at par with international universities, would you still want to study abroad?	45
A.22	From the following which factors according to you would be influential in choosing to permanently settle in the host country?	46
B.1	Sample Profile – Group 1 – Students in India	74
B.2	Do you want to study abroad?	76
B.3	Do you currently have a plan to study abroad?	77
B.4	If yes, which country are you planning to study in?	77
B.5	If no, in which country would you prefer to study?	78
B.6	Sample Profile – Group 2 – Indian students in Europe	78
B.7	Which country are you currently studying in?	80
B.8	According to you, which of the following factors could be influential in deciding where and what to study?	81
B.9	Would you return to India after completing your studies in the host country?	82
B.10	If yes, which of these are the factors that would influence your decision in returning to the India?	83
B.11	If No, which of these are the factors that would influence your decision to stay back in the host country?	84
B.12	After completing your studies, when are you likely to return to India?	85
B.13	After completion of your studies, would you look for job opportunities in the host country?	86
B.14	If you get a job after completing your studies, would you stay back in the host country?	87
B.15	If you get a job, when are you likely to return to India?	88
B.16	If you do not get a job after completing your studies, would you still stay back in the host country?	89
B.17	If you do not get a job, when are you likely to return to India?	90
B.18	If you get a job in the host country, would you still prefer to return to India?	91

B.19	Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?	92
B.20	Based on your educational qualifications/area of specialization, where do you see better job opportunities?	93
B.21	According to your opinion, from the following, what does India lack that could be the main reasons for emigration of Indian students?	94
B.22	If all Indian educational degrees were internationally recognized, would you still want to study abroad?	95
B.23	If quality of education in India was at par with international universities, would you still want to study abroad?	96
B.24	From the following which factors according to you would be influential in choosing to permanently settle in the host country?	97
C.1	Sample Profile - Group 1 – Students in India	98
C.2	Do you want to study abroad?	100
C.3	Do you currently have a plan to study abroad?	100
C.4	If yes, which country are you planning to study in?	101
C.5	If no, which country would you prefer to study?	101
C.6	Sample Profile – Group 2 – Indian students in Europe	102
C.7	Which country are you currently studying in?	104
C.8	According to you, which of the following factors could be influential in deciding where and what to study?	105
C.9	Would you return to India after completing your studies in the host country?	106
C.10	If yes, which of these are the factors that would influence your decision in returning to the India?	107
C.11	If No, which of these are the factors that would influence your decision to stay back in the host country?	108
C.12	After completing your studies, when are you likely to return to India?	109
C.13	After completion of your studies, would you look for job opportunities in the host country?	110
C.14	If you get a job after completing your studies, would you stay back in the host country?	111
C.15	If you get a job, when are you likely to return to India?	112
C.16	If you do not get a job after completing your studies, would you still stay back in the host country?	113
C.17	If you do not get a job, when are you likely to return to India?	114
C.18	If you get a job in the host country, would you still prefer to return to India?	115
C.19	Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?	116
C.20	Based on your educational qualifications/area of specialization, where do you see better job opportunities?	117

C.21	According to your opinion, from the following, what does India lack that could be the main reasons for emigration of Indian students?	118
C.22	If all Indian educational degrees were internationally recognized, would you still want to study abroad?	119
C.23	If quality of education in India was at par with international universities, would you still want to study abroad?	120
C.24	From the following which factors according to you would be influential in choosing to permanently settle in the host country	121

Chapter 1 - Introduction

India today, although a developing and a middle-income country, is identified as a key player in trade and investment on the global economy and has enjoyed diplomatic relations with the countries of the now designated European Union (EU) since the 1960s. This could be accredited to the fact that awareness about Europe was acknowledged during the rule of the Mughal Empire mainly through documented trade with Portugal and Spain, but later Indian migration to Europe was heavily influenced by it being a former colony of Portugal, the Netherlands, France and Britain.

This led to India being one of the first countries to establishing diplomatic ties with the newly formed European Economic Community in the 1960s (Potnuru and Sam, 2015). The EU consists of 28 European countries that have come together to form a unique economic and political partnership. India and the EU are part of a Strategic Partnership under the Joint Action Plans and Cooperation Agreement¹ that has enabled strengthening of bilateral relations and cooperation in trade and in other relevant areas (Government of India Ministry of Commerce and Industry, 2005).

Education is one sector that has fostered and strengthened bilateral relations between India and the EU. The latter has supported the education sector in India by providing funding for various programs and also through fellowships to Indian students that have in turn facilitated Indian student mobility to the EU. Thousands of Indian students benefit from such facilities every year and move to the EU to pursue higher education and also in search of better career prospects. This contributes to the diversification of the student population at European universities. The global population of European universities is also one of the factors which attracts Indian students to these countries, as it facilitates the learning process and provides rich knowledge sharing opportunities.

In 2014, India had the world's largest youth population. 356 million people in India are within the age group of 18-24 years, which is a mere 28% of the total population of India (The Hindu, 2014). Currently, the figures of mobile Indian students abroad stand at 278,383 (UNESCO for Statistics, 2016). India is the second largest source of students to foreign universities, after China, but is the largest source of international migrants worldwide. According to Pew Research Centre,

¹ For more detailed information, https://eeas.europa.eu/delegations/india_en

although Indian-born migrants account for the largest share of international migrants, India's emigration rate as of 2015 was only 1% (Pew Research Centre's Global Attitudes Project, 2016).

Due to increasing student migration in countries all over the world with, *inter alia*, political factors encouraging it, there are also cultural and financial implications. Often, students try to find job opportunities in the host countries that pave the way for the students to permanently settle in the host countries. This in turn leads to the students becoming highly skilled workers, bringing positive outcomes to the host countries. However, this trend drains the sending or home countries, of these highly skilled workers, bringing economical and financial problems due to shortage of labour. Recently though, a reverse trend has been brought into focus wherein international students coming from India or even China are moving back to their home countries post completion of studies (Potnuru & Sam, 2015). This trend will further be evaluated through supporting literature and the findings of this dissertation. What has caused the reverse trend? The economic advancement in India during the last two decades has resulted in better opportunities for skilled labor. In this context, India is set to gain from the student mobility to EU. Nevertheless, the study will throw light on the several factors that motivate the students to either stay back in the host country or return to India.

The world is becoming a global village with shrinking boundaries, and learning about different types of migration peaked in interest. The same is true for finding out more about one particular type of migration, student migration, a broad area to carry out this research. There are many students that move from their home to different countries to pursue their education and socio-economic factors are taken into consideration before making this move.

This study is distinct from previous studies in many aspects and has three main objectives. It aims to: investigate the premise behind the outflow of Indian students to the EU; identify the recent trends of mobility vis-à-vis choices of destination countries; identify the factors that influence the return of Indian students or motivate them to permanently settle in the EU post completion of studies, leading to brain gain or brain drain in India. We also examine the issue of skilled migration in the form of student mobility between the home country, India, and the host destination, the EU, and address the repercussions of internationalization of education in the form of brain drain.

We developed this research out of curiosity and academic interest in the field of student migration and mobility. While going through a similar situation, a question formed in our minds and that was whether we would return to our home country after completing our education. This question

has formed the basis of this study and encouraged us to delve deeper into finding the results by considering the various factors that could influence a student's decision to either settle in the host country or return to the home country. The study is thus centred around the following research questions: 1) Which factors do Indian students consider while deciding the European destination host country for higher education? 2) Do Indian students return to India post completion of studies in the EU and does this lead to brain drain or brain gain in India? Which factors (economic or social) influence the decisions of Indian students to stay back in the host country or return to India? And finally, 3) does India-EU student mobility lead to brain drain or brain gain?

There is a steady increase in the number of Indian students selecting different countries to go for higher education or better career prospects. United States, United Kingdom, Australia, etc. have always been some of the major destinations for Indian students. However, there has also been an increase in selecting Western European countries. The study is useful to help understanding current trends in Indian student migration, the factors influencing India-EU student mobility and whether this migration trend is beneficial to India or is increasing the risk of brain drain. This study is relevant from a public policy point of view as it is important for any country to value and examine potential movements of highly skilled workers that could have a major impact on its domestic economy.

In answering the proposed questions, the study will help to understand recent patterns of student migration between India and EU through a close analysis of available student migration data. Evidence collected from the survey and the supporting literature help to derive conclusions and facilitate understanding of the various factors influencing Indian student migration to the EU. It would also provide conclusions on whether Indian students return to the home country post completion of studies in the host destination leading to brain gain or brain drain. An important outcome of this study would be that researchers in this field could use the results of this study to further delve into studying and analysing similar relationships with other countries or could also further enhance this topic. We expect that policy makers and institutions researching in similar areas find this study relevant and inculcate the findings in their policies or research, that could further influence decision makers to take necessary actions that would benefit the society at large.

In this study, Chapter 1 comprises an overall introduction of the study, providing a brief idea of the importance of Indian student migration and the relationship between India and the EU. Previous studies have brought to light various theoretical frameworks of migration.

Chapter 2 comprises the main concepts, theoretical framework and the existing literature that can



support the study's results or the understanding on which the study is based. The literature consists of various research papers, journal articles and newspaper articles centred on the theme of the study. Chapter 3 includes the methodology implemented to carry out the research and consists of information on the research design, sample size, population composition and the results of the survey carried out, with important findings followed by a discussion. The conclusion of the study and its future use form Chapter 4.

Chapter 2 – Main Concepts, Theoretical Framework and Literature Review

Chapter Summary

In this chapter firstly, we explain the concepts of brain drain, brain gain and brain circulation that form an important base of this study. We also connect the existing theories, that are a part of the theoretical framework for this study and the literature. We try to identify the research gap after analysing the available literature. In terms of existing literature, previous studies were seen to have concentrated mainly on studying factors influencing Indian student migration or factors causing brain drain in sending countries, opinion studies were not conducted to gauge responses of students whether they would return to their home country post completion of studies in the host country. The relevant theories too, are mainly from the labour migration or a general migration point of view. We have taken the core essence of these theories, to match their relevance to this study and also tried to bring new ideas explained further in major findings.

Main Concepts

Brain Drain, Brain Gain and Brain Circulation are important concepts in not only academic research but also in political and policy debates. Studies have been carried out by various scholars to understand effects of brain drain since the 1960s. A net negative for the sending country and a net positive for the receiving country caused due to an economic impact by this migration was linked to the brain drain and brain gain literature (Han et al, 2015, p.p. 2).

The term brain drain has been conceptualised to signify a “one-way movement of students from developing countries to developed countries”. The term “brain” is used to refer to the student or the professional, skilled worker and “drain” is used when there is no return movement of students back to their home countries and results in the home countries losing such skilled people. Brain drain is also known as human capital flight, brain transfer, brain haemorrhage, or brain overflow (Varma & Kapur, 2013, p.p. 315-318) (Riaño, 2012). Brain drain, basically refers to a mass emigration of highly skilled persons to countries that they perceive would provide better education and economic opportunities than their home countries.

In India, initially, this phenomenon of brain drain began with a number of scientists and people belonging to the engineering, medicine and technology fields moving to foreign countries in search of better opportunities, especially in specialised fields of research. India, although was developing its research and innovation sector, was not equipped to provide such opportunities at

that time. This trend then picked up, resulting in students, researchers and skilled professionals moving to other countries in large numbers affecting different groups in the society and the Indian economy. Usually, for developing countries like India, the effects of brain drain are severe (Raveesh, 2013, p.p. 12-17). Brain drain causes tax revenue losses in developing countries, reduces the stock of human capital thereby slowing down the economic growth of a country and fuels the technological gap between developed and developing countries (Docquier, 2014, p.p. 5).

Immigration of skilled students and workers represents a brain gain for those countries that benefit greatly from their experience and skills. Countries facing labour and skill shortages are constantly trying to reform their immigration policies so that they are able to attract the desired types of highly skilled international students and workers. Although mass movement from developing countries is a brain drain for those countries, it is brain gain for the developed countries (Varma & Kapur, 2013, p.p. 315-318) (Centre for Research and Policy Making, 2012). Brain gain leads to stronger but steady growth rates in receiving countries as immigration of highly skilled workers contributes to the growth of skilled population allowing for a transfer of knowledge and a different approach to achieving outputs. Labour market integration allows for “significant exertion of positive spillover effects in the destination country and also leads to an overall enriching cultural experience through interaction with natives” (Boeri, 2008, pp 30, 34).

Favourable economic growth and opportunities created by advancement in technology can appeal the high-skilled worker to return home who migrated to developed countries in pursuit of better education and business opportunities. This recent phenomenon is termed as brain circulation. R T Appleyard (1989) argued the return of migrants with new ideas, skills and ambitions tends to have a major positive impact on developing countries’ economic growth and social structure. Migrant students are returning home as high-level opportunities in developing countries are providing many attractive opportunities which also comes with the emotional benefit of being closer to home and family. It represents a “two-way” migration compared to brain drain which is a “one-way” migration. Brain circulation is also known as “reverse brain drain”, “brain pendulum”, “brain exchange”, “brain mobility” and “brain return.” Brain Circulation is viewed positively for developing countries, it is brain gain for the home countries whereas it is a loss for the developed countries i.e. brain drain for the host countries (Varma & Kapur, 2013, p.p. 316-319).

Theoretical Framework and Relevant Literature

The dissertation takes into account several existing theories on brain drain, brain gain and migration. Studies carried out consisting of theoretical frameworks with respect to brain drain and brain gain are in relation to migration of skilled workers from developing countries to developed countries and are available since quite early periods i.e. the 1960s.

The theories about the implications of brain drain were mostly taking into consideration employment, labour movement, impact of wage settings, etc. Grubel and Scott's theories were centred on the idea that brain drain was basically a negative externality and that emigration of highly skilled workers leads to losses in the sending country. In their view, emigration would lead to welfare losses in the sending country especially if education was publically funded, as emigration would reduce the human capital stock of the sending country, lead to an increase in taxes resulting in reduction of productivity of the labour left behind (Grubel & Scott, 1966) (Groizard & Llull, 2006).

Bhagwati and Hamada (1973) have established a general-equilibrium framework that mainly was used as a model for the labour market of the sending or home country. This model highlighted the benefits of emigration of skilled labour, on the labour remaining in the sending country that would also indirectly benefit the sending country. Wage setting and financing of education plays an important role in this model. The emigration of high skilled workers gives way to a positive supply of skilled workers as it lowers skilled unemployment in the home country and increases expected wages. However, this depends on how well the gap can be covered between skilled and unskilled labour (Groizard & Llull, 2006) (Bhagwati & Hamada, 1973). Although this model provides an interesting take on the brain drain and brain gain theory, the model is not particularly based on brain drain as a cause of student migration and takes into consideration only movement of skilled labour and its impact on unemployment in the home country.

Stouffer's theory of Intervening Opportunities (1940) explains that migration does not take place by considering the distance between two places or the population of the two places, but rather by considering the opportunities or benefits that may exist in these places or between them. "Stouffer's model suggests that the number of migrants from an origin to a destination is directly proportional to the number of opportunities at that destination and inversely proportional to the number of intervening opportunities between the origin and the destination" (Stouffer 1940, p.p. 845-867). This theory is relevant to the study as it refers to the push and pull factors of migration and states that migrants choose a destination only after evaluating the benefits they would reap if they were to migrate to that particular place. Students migrate to their preferred destination

only if they expect to benefit from high career opportunities from that place and do not necessarily take the distance into account.

Mountford (1997) also considered an “overlapping generations model” in which individuals first decided whether they want to make an investment in education or not (students tend to weigh the pros and cons and analyse the costs they would have to pay to reap certain benefits in their pursuit for higher education), then whether they want to work in the country or emigrate, and lastly where they would live after retirement. If for the sending country, there is a low expectation on returns to education, opening the country for possibilities of skilled migration leads to reduction in human capital stock. This further allows for increase in investment in education for the remaining population resulting in a net brain gain in the home country (Groizard & Llull, 2007, p.p. 3).

Network theory, migration systems theory, and transnational migration deal with the factors affecting migration, the conditions at both the receiving and the sending ends, the root causes of migration, thus helping in understanding the movements and distribution patterns of migration. “The existence of Diasporas or networks is likely to influence the decisions of migrants when they choose their destinations” (Kurekova, 2011, p.p. 10). This could also be possible in the case of our dissertation’s study as the students would prefer to go to a destination that has already formed a relevant network of previous migrants. Students who choose a university based on the locality are basically demonstrating this. According to a Postgraduate student, who was studying a Master’s degree in European Studies from Hochschule Bremen in Germany, it is always helpful to know that some previous students from the home country are at the university. These students form part of student cultural associations and help newly arrived students to be able to integrate into the host country. This network of students could also be the bridge between working alumni, the diaspora or expats and the students; that would lead them to find job opportunities or any information in general.

The network theory is closely affiliated to another approach known as migration systems theory, pioneered by Magobunje (1970). This theory’s main assumption posits that, “migration alters the social, cultural, economic, and institutional conditions at both the sending and receiving ends and that it forms an entire developmental space within which migration processes operate” (Kurekova, 2011, p.p. 10). The study being conducted aims to understand the impact of Indian student migration, which is how the conditions change at both the sending and receiving ends. Where the host country experiences benefits (brain gain) in the form of rising human capital, the

sending country suffers due to the loss of human capital (brain drain). This theory provides a more general and negative understanding of brain drain. However, recent literature provided for a more positive result for the work surrounding brain drain, where brain drain results in the home countries receiving high remittances from their diaspora based in foreign countries; who also play intermediaries in bridging gaps between the two countries (Sahay, 2009).

Although the theories above are relevant to our study, they focused more on the labour and employment perspectives and the cause and effect of labour migration from India to foreign countries and its subsequent effect on brain drain and brain gain. The theoretical gap that this study would try to bridge is in relation to the cause and effect of student migration from India to the EU and the perceived effect on brain drain and brain gain.

There are existing studies through which the importance of India-EU relations and student mobility can be established. The available papers address the Indian students' demand for higher education in alternative destinations, the factors influencing students' choices for higher education, or the challenges faced by students in the course of mobility.

A 2001 study by the Organisation for Economic Co-operation and Development (OECD) - *Trends in International Migration* - provides statistical data and information on student mobility between and to OECD countries that helps in identifying the rising trends of international migration, the reasons for such increasing distribution patterns and migration due to student mobility. Also, the UNESCO Institute of Statistics (UIS) has provided data for the Global Flow of Tertiary- level students, which shows that the number of students moving abroad to pursue higher education has increased. According to this source, China and India are the two top countries of origin from where students move to universities all over the world, to pursue higher education. As of 2016, China counted 847,259 students studying abroad, followed by India with 278,383. The top destination countries for such students are the United States, Australia, United Kingdom, Germany, France, etc. For the purpose of this study, we extracted the outflow of students from India to countries in the EU that formed the base for deriving the information required for distributing the questionnaires (UNESCO, 2016).

The concepts of brain drain, brain gain and brain circulation are studied by various researchers (see Grubel and Scott, 2007; Groizard and Lull, 2006; Varma and Kapur, 2013; Thomas, 2014). In a similar perspective Potnuru and Sam (2015) and Candan & Hunger (2013) studied Indian migration from not only a historical perspective but also addressed current trends and possible future challenges. They presented the traditional aspects of brain drain and brain gain concerning

labour movements and Indian emigration as a whole.

The issues of brain drain or gain are examined by Sahay (2009) who has portrayed brain drain in a positive light. The author writes about brain drain turning into brain circulation or brain gain when the home countries start benefitting monetarily or in terms of knowledge-transfers from the Indian migrants in the United States. Traditionally, it was always perceived that Indian migration to the United States always resulted in a negative socio-economic impact of brain drain on the Indian society. If students were to migrate to the United States for further education, the system that connects universities to industries resulting in higher job opportunities for Indian students, would lead to them adapting to an American lifestyle and settling down in the United States, meaning a negative impact on the home country's economy causing brain drain. This would enable the Indian diaspora to further increase in numbers, resulting to benefit monetarily via increasing remittances and also transfer of knowledge and skillsets. Since India has a large human capital stock, outward movement of skilled labour in turn leads to educational and work opportunities for those who remain, resulting in brain gain in the country. Here, the author is demonstrating the same characteristics as the Overlapping Generations Model from Mountford's theory.

On the contrary, Buga & Meyer (2012, p.p.13) argue that in the long run, brain drain may be converted into brain gain. The authors analysed migration of Indians who are highly skilled in the context of globalisation considering large numbers of skilled professionals going abroad, which would provide an assumption that India has a big problem of brain drain. However, in reality only a few sectors face the problem of brain drain. Candan & Hunger (2013) also discussed how the situation of skilled migration from developing to developed countries does not necessarily mean that there will be a negative impact on the developing country as brain drain can be converted into brain gain. The role of the Indian government in trying to ensure minimal loss from migration of qualified professionals and trying to turn the situation into one of brain gain of highly skilled expatriates is assessed.

Raveesh (2013) evaluated the impact of Indian skilled migration on Indian society. The author identified India as the major supplier of human capital to countries all over the world and addresses the problem of brain drain arising from increased migration. The paper also points towards the areas of technology, science and medicine as the major education backgrounds of people moving to other countries for further education and stresses on India's loss of skilled professionals such as doctors, engineers, technicians and scientists to other countries. However,

with more opportunities in India, more and more Indian students are opting for options for higher education in India and not choosing to migrate.

Thomas (2014) focused on the implications of brain drain on developing countries. Brain drain has increasingly become a major cause of concern in such countries, mainly due to dipping rates of human capital stock in specialised fields such as medicine, technology, etc. The article focuses on Indian student migration to the United States and tries to address the problems of dipping rates of Indian students' enrolment in US universities compared to other countries such as Australia, the United Kingdom, Germany, etc. Moreover, Naujoks (2009) focused on the diversity and complexity of the migration histories of India. The author examined migration patterns to and from India in the past, helping in identifying various paths for migration, i.e. current migration flows and flows due to India's colonial past, or student migration. He also explains India's diasporas in the form of immigration policies of India and immigration to India, and enables the understanding of Indian students' migration through a historical perspective that facilitates the identification of its main determinants. He also explains India's diasporas in the form of immigration policies of India, and enables the understanding of Indian students' migration through a historical perspective i.e. choosing universities based on more traditional choices such as the United States, UK, Australia, etc. that facilitates the identification of the main determinants of brain drain vis-à-vis higher education being a gateway for finding jobs leading to possibility for permanent stay in the host countries.

Mukherjee & Chanda (2012) have studied the evolution of education in India and in the world. Focusing on the impact of globalisation on education and the growth of student mobility through the years, the paper describes trends of Indian student migration to the EU, with a special emphasis on three major markets - the United Kingdom, France and Germany – and on the challenges faced by Indian students moving to these countries and to Europe in general. Furthermore, the paper identifies various factors which motivate Indian students to pursue higher education abroad, in addition to market features of the host countries which attract them. The authors also discuss the factors lying behind student choices to move to these countries; international exposure, opportunity to migrate to the host countries, lack of institutions and high competition in India, and to attain a foreign degree. The UK, because of students preferring to move to English speaking countries, and because of UK's reputed education system. Germany and France, mainly because they offer a considerably cheaper option for attaining higher education, more options for specialisation and also the availability of scholarships. Thus, economic and cultural factors play a major role in the choice of a host destination for an Indian

student (p.p. 27-30, 40).

According to Naujoks (2009), Buga & Meyer (2012), the United States and the United Kingdom are always preferred amongst Indian students, although Western European countries have risen to be some of the most important destinations for such students. Western European countries are being selected as migration options in recent years owing to the changes in European immigration policies. These authors discuss an increase in Indian student migration over the years and the students' preferred destinations. This is also observed by Mukherjee & Chanda (2012), who throw light on the changing trends of Indian student migration that includes shifts in choices made by the Indian students in terms of destination for study in the EU. Additionally, the authors also provide important statistical observations that help establish India as an important source country and provides data for the share of international students hosted by European countries. Additionally, the authors also provide important statistical observations that help establish India as an important source country and provides data for the share of international students hosted by European countries. As per the study which included a survey of 120 students in Europe, 25 per cent are in Germany, 19.7 per cent and 14.5 per cent are in France and the UK respectively (p.p. 40).

MacGregor (2014) examined the rise in student flows in the EU and Eastern Asia, tracking down international mobility trends. The author stresses the rise in enrolments of foreign students in universities across the world, identifying Europe as an emerging top student destination region. She points out the reasons behind the decision making of the foreign students to choose a particular destination for higher education which include: the international reputation of an academic institution, tuition fees, the language a particular course is taught in, future job opportunities, recognition of foreign degrees, and historical and geographical links to the host country. The authors observation is incorporated in the questionnaire to reaffirm the factors determining students' choice of a particular destination. The article provides information on Indian students migrating to explore opportunities for higher education in the United States, UK, Australia and Canada.

India-EU student migration is dependent on economic and social factors that influence the decisions of the students to stay in the host countries. The perceived economic benefits of the host country, in terms of availability of jobs in specialised fields, opportunities for higher earnings, etc. play an important role in the students' abilities to return. Then, restrictions in terms of immigration procedures and personal interactions play a role in determining if the students

can continue living in the host countries. Indian students are deeply rooted in their cultural and familial habits. They have strong ties with their families in their home country and students' are usually drawn back to India due to social and cultural reasons and their inability to integrate in the host country's academic, social or cultural life (See Mukherjee & Chanda 2012; Han et al, 2015, p.p. 2-5; Potnuru & Sam 2015; Thorat 2017).

Mukherjee & Chanda (2012) have supported the idea of India-EU student mobility and have tried to provide recommendations as to how such student mobility can be made better and easier. Their work is relevant to our study as it facilitates understanding of the factors such as, the higher education industry being commercialized on a large scale and increasing demands of the labour markets in Western countries mainly because of the significant demographical changes; and challenges of India-EU student mobility (pp. 2). The reasons behind the increasing demand of Indian students for a European education are also highlighted which include lack of quality of education in Indian universities especially in engineering institutes, excessive competition and a want to attain a foreign degree (pp. 16-18). The authors have also described the factors, such as development in European policies, that influence student mobility to two major countries in the EU, France and Germany from a leading source country - India.

Altbach (2014) helps to track down the reasons for the departure of Indian students to other countries for higher education. Through this article a base understanding can be formed for increase in the choice of study programmes abroad. The author emphasises the need of an Indian student for studying abroad, stating that sometimes he/she has no choice other than to study overseas because some fields are very limited options for higher education, and in cases such as social sciences and humanities there are very few respectable departments in Indian universities, but none considered by international experts as able to provide top academic programmes and also stresses that the academically well qualified prefer to go abroad for higher education due to a lack of facilities, resources and opportunities for higher research in India.

Hercoq & van de Laar (2013) discussed the factors that affect the preferences of students while choosing the international destination where they wish to continue their education. The paper also discusses determinants of student choices including opting for international mobility or staying in India. This paper is important as it helps to understand student mobility patterns and the factors that an Indian student considers while deciding the destination such as professional aspects. The factors discussed by Hercoq & van de Laar are quite similar to Han et al (2015). Han et al provide good examples of the situations that the Indian students who have moved to

the United States for better education and career prospects face after graduation. Various factors that influence a student's decision of whether to continue living in the United States after graduating or to return to the home country are discussed. The authors discuss that a person tends to stay anywhere their skills are valued and that their decision to return are mainly based on peer to peer relations including stronger familial and cultural ties whereas their decision to stay mainly depended on availability of jobs, opportunities in a research-oriented or a specialised career field and opportunities for higher earnings and leading a higher standard of life, and the perception that they would not receive better treatment back home. However, the research also finds that more number of students are returning to their countries of origin leading to the US probably losing its competitive edge (pp 3-9-15). This research article is important as it is quite similar to the essence of this study, difference being that this study is being undertaken to understand recent trends in Indian student migration to the EU (Also see: Thakur, 2012; Thorat, 2017).

Varma & Kapur (2013, p.p. 315-330) made two interesting observations that are also important to this dissertation. First, that more and more Indian students are preferring to continue higher education in India and not choosing to migrate and second that "if students are interested in studying abroad, they are holding stronger intentions of returning to India immediately for jobs and careers (p.p. 316)." These observations are important as we also aim to find whether Indian students return to India after they have completed their studies in the EU. The paper is a study of five Indian Institutes of Technology as, according to the authors, the majority of migrating Indian students are from the science, engineering and medicine areas. Although the population of the study is limited to the students from fields such as science and engineering, i.e. from the IITs, the paper provides an interesting take on the opinions and attitudes of students planning to study abroad. From the survey conducted more number of students were planning to stay in India than to move abroad post graduation. Students who were planning to continue studying wanted to switch fields from engineering to business. The students who wanted to move abroad, saw the move as an opportunity to serve India mainly financially via remittances, an opportunity to educate non-Indians about India. The main finding of the study that is of most importance to this study was that the students wanted to move temporarily and said that they planned to return with additional skills and knowledge that would benefit India in the long term (pp 323-327).

In a 2016 article in the Economic Times, "Why scientists of Indian origin are leaving a better life and returning to India", Vanita Srivastava points out various reasons triggering the return of Indian scientists who are leading a well settled life in foreign countries. According to the interviews the writer has conducted, the main reason stems from the fact that in recent years India

has changed drastically and has grown exponentially in providing research opportunities, thanks to the government's initiatives to reverse brain drain. The other important reason is that Indian scientists see returning to India and following their work there, as a service to the country and a contribution to improving the research scenario in their own country. India has become a global development, design and research hub. Many scientists, who took post-graduation studies in the United States, the United Kingdom or Germany, are now returning to India to tap into the growing research potential that the country is showcasing.

Potnuru and Sam (2015) have highlighted the main challenges Indian students face post completion of their degrees in both the host countries in the EU and in India. The points raised mainly in what concerns India-EU student mobility, lack of attention to key aspects during and post mobility, strict immigration policies and rigid laws highlight the importance of this dissertation.

From the above literature surveyed, the books and articles presented enhanced the quality of the study. The literature, especially the survey conducted by Han et al (2015, p.p. 1-18) inspired us to design questions for conducting our own survey, that would allow us to find out the recent trends of India-EU student mobility in terms of preference of host country, the factors influencing decisions of the students to stay back in the host country, opinion regarding the conditions in the home country that influences emigration and whether the students would return to the home country or stay back in the host country post-completion of studies.

Research Gap:

The reviewed literature examined factors that facilitate internationalization of higher education and is useful for the understanding of the concepts and phenomena of brain drain and brain gain. Studies have also been conducted to examine the impact of brain drain on countries that source skilled mobility and the rising shift in choices of destinations for higher education pertaining to Western European countries. Existing studies have mainly focused on the reasons behind a student's choice of destination such as problems and lack of facilities for higher education in India and policy developments attracting foreign students to study in developed countries facing labour shortage; and recent trends or changes in patterns of mobility like choosing to study in Western European countries over more traditional choices such as the US, the UK, Australia and Canada.

Brain drain or gain is also discussed mainly for skilled labour migration or professional

migration. There are fewer studies discussing brain drain as an effect of student mobility. However, this dissertation focuses on student mobility between India and the EU, and whether Indian students return to India post completion of studies in the EU to look for further career prospects or prefer to settle in the host country in the EU. The findings will help us to deduce whether the current situation of student migration is leading to brain drain or brain gain. This dissertation takes into account factors responsible for student mobility and those causing brain drain or brain gain.

Chapter 3 – Methodology, analysis of the results, and major findings

Chapter Summary

A survey was carried out by forwarding questionnaires to two groups of Indian students, those who were in India and were planning to study abroad and those who were already studying in the EU. This chapter provides detailed information on how the survey was carried out, during which period, and what methodology and techniques were applied to reach the results of this study. The main objective of this chapter is to prepare and implement a methodology that helps us to measure the data collected from the survey and to give insight on the variables, instruments applied, the sample selected, in the process of data collection and analysis.

Secondly, we analyse the findings of the survey in detail by using the various statistical tools available in Microsoft Excel. The study's findings are interpreted and analysed by presenting the relevant statistical data, forming a link also with the secondary research data from the literature review. This chapter analysis all responses to all sets of questions asked in the survey and analyses the theoretical findings from the narrative surrounding student migration, brain drain and brain gain.

The findings and results of the survey are attached in detail and can be found in the Annex [here](#). In relation to the aim of the study, the data collected are presented according to the two groups of students. Group 1 students consisted of students who are currently in India and have plans to study in a European country and Group 2 students consisted of students who are currently studying at a university in a EU member state. We interpret the results from the data collected in 2015 and 2016 for both groups which is also supported by findings from the relevant literature and theoretical framework. The graphical figures represent consolidated data for 2015 and 2016 for both groups.

I. Methodology

Research Design

The most suitable method for this study was qualitative analysis as the study has a descriptive research design. Firstly, two questionnaires were designed that consisted of precise and logical questions based on studies highlighted in the literature review. The questions were designed keeping the main research question at the core and the understanding of the key factors from the literature surveyed, that influenced the student migration i.e. the economic factors and the social factors. The questionnaires were uploaded using Google survey sheets and distributed to the respondents in the form of online survey. The reason for this strategy was the need to work with two different groups of sample designs which were not possible to cover through printed questionnaires. The questions were asked in two parts.

In the first, questions were asked with the objective of obtaining the demographic data about the respondents, such as Age, Gender, Field of study, Family's Annual Income and where the respondents were from. In the second, questions asked were directed to the research questions, keeping in mind the main objectives of the study. The questions in the second part are designed to understand if there is a want of Indian students to study abroad and what is their preferred destination. The questions are inspired from the literature surveyed (Han et al, 2015) to examine the economic and social factors that influence the India-EU student mobility. The respondents were allowed to answer the questionnaires at their own convenience. In the second stage, the collected data was manually entered into Microsoft Excel spreadsheets and analysis was developed using the statistical tools and designs available in Microsoft Excel.

Period of the study

The study was conducted in two phases, firstly in the period from February 2015 to June 2015. The data was collected in the months of May and June 2015. The population was from the academic year of 2014-15 for Group 1, as well as for Group 2. Secondly, the study was continued in the period from December 2015 to July 2016. The data was collected between March 2016 and May 2016. The population was from the academic year of 2015-16. The study was concluded in 2017 after careful consideration of the data and facts gathered and drawing conclusions.

Population of the study

The population for this study were students at Manipal University, Karnataka (these formed Group 1), and defined as any Indian enrolled in any course offered by Manipal University, and active in his or her course, at the time of data collection. The questionnaires were however, applied to students enrolled in a program at the Department of European Studies in the master program, as well as to those who were studying in the French, Spanish and German language certificate courses. Group 2 included Indian students living in any country in the EU and active in the courses offered by European universities at the time of data collection. Group 1 comprised of 120 respondents in total and Group 2 comprised of 313 respondents in total for the years 2015 and 2016. Two groups were taken for study to ensure accuracy and robustness of the data analysis and outcomes, to gauge opinions of students planning to go to foreign countries for further studies and students already studying in foreign countries. Group 1 included any student that was planning to study abroad. However, group 2 was limited to Indian students studying in an EU member state.

For the entire period of data collection, Group 1 is represented by male students in majority. From the total students, the majority is between 18-21 years of age, belongs to middle income earning families, is from urban and metropolitan areas and is registered in courses in the field of engineering. Group 2 is also represented by a population with similar characteristics, except that the age of the students is between 22-25 years. The detailed description of the consolidated sample profiles for the years 2015 and 2016 is presented as Table 1 and Table 2. Group 1 is represented by students who are mainly in the first cycle of university i.e. the Bachelor level whereas Group 2 is mainly represented by students in the second cycle of university i.e. Masters or other post- graduation studies. This characterization of the population is derived from the results of the survey. We can conclude that Indian students want to move or move to different countries mainly for post-graduate studies.

Table 1. Sample Profile – Group 1

Age Group

	18 - 21 years	22 - 25 years	26 - 30 years	31 and above	Grand Total
Female	18%	11%	3%	2%	33%
Male	38%	26%	2%	1%	67%
Grand Total	56%	37%	5%	3%	100%

Field of Study (Current)

	Communication	Engineering	Health Sciences	Management	Others	Social Sciences	Grand Total
Female	4%	12%	6%	3%	3%	6%	33%
Male	0%	51%	3%	3%	6%	4%	67%
Grand Total	4%	63%	9%	5%	9%	10%	100%

Family annual income

	0 – 5,00,000	10,00,001 – 15,00,000	15,00,001 – 20,00,000	20,00,001 – 25,00,000	25,00,001 and above	5,00,001 – 10,00,000	Grand Total
Female	5%	11%	3%	3%	3%	8%	33%
Male	16%	14%	7%	5%	9%	16%	67%
Grand Total	21%	25%	10%	8%	12%	24%	100%

Where are you from?

	Metro	Rural	Semi rural	Semi urban	Urban	Grand Total	
Female	11%	1%	3%	6%	13%	33%	
Male	23%	3%	1%	11%	29%	67%	
Grand Total	33%	4%	3%	17%	43%	100%	

67 per cent of the respondents were males whereas 33 per cent were females.

Respondents in the age group of 18 years to 21 years were represented in majority (56 per cent) followed by age group of 22 years to 25 years with 37 per cent of total respondents. 5 per cent of the total respondents were in the age group of 26 years to 30 years. The respondents in the age group of 31 years and above represented only 3 per cent of total respondent.

Majority of the respondents were engineering students, constituting 63 per cent of the total respondents. Social sciences students represented 10 per cent of the respondents. Management and communication students constituted 5 and 4 per cent respectively. 9 per cent of the respondents belonged to the health sciences and 9 per cent did not belong to any field of study mentioned above.

25 per cent of the respondents have family annual income between ₹10,00,001 to ₹15,00,000 that is represented in majority. 24 per cent of the respondents have family annual income between ₹5,00,001 to ₹10,00,000. 21 per cent of the respondents have family annual income between zero to ₹5,00,000. 12 per cent respondents have family annual income that is ₹25,00,001 and above and 10 per cent of the respondents have between ₹15,00,001 to ₹20,00,000. This shows that majority of the students come from middle income families.

43 per cent of the total respondents belong to urban areas and are represented in majority. 33 per cent of the respondents are from metro areas and 17 per cent belong to semi urban areas. Respondents belonging to semi-rural and rural areas are 3 and 4 per cent respectively.

Table 2: Sample Profile Group 2

Age group

Column1	18 - 21 years	22 - 25 years	26 - 30 years	31 and above	Grand Total	
Female	0%	8%	4%	1%	13%	
Male	3%	41%	35%	8%	87%	
Grand Total	4%	49%	39%	9%	100%	

Count of Field of Study (Current)

	Engineeri ng	Health Sciences	Management	Others	Social Sciences	Grand Total	
Female	4%	1%	3%	4%	3%	13%	
Male	56%	6%	14%	9%	2%	87%	
Grand Total	59%	8%	16%	12%	4%	100%	

Family annual income

	0 – 5,00,000	10,00,001 – 15,00,000	15,00,001 – 20,00,000	20,00,001 – 25,00,000	25,00,001 and above	5,00,001 – 10,00,000	Grand Total
Female	5%	1%	2%	1%	0%	4%	13%
Male	33%	14%	6%	3%	4%	27%	87%

Grand Total	37%	15%	8%	3%	5%	31%	100%
--------------------	------------	------------	-----------	-----------	-----------	------------	-------------

Where are you from?

	Urban	Metro	Semi urban	Rural	Semi-rural	Grand Total	
Female	4%	5%	2%	2%	1%	13%	
Male	29%	24%	19%	11%	4%	87%	
Grand Total	33%	29%	20%	12%	5%	100%	

Male respondents were represented in majority in this survey. 87 per cent of the respondents were males whereas 13 per cent were females.

The study was conducted amongst the Indian students currently studying in European Universities. Respondents in the age group of 22 years to 25 years were represented in majority (49 per cent) followed by age group of 26 years to 30 years with 39 per cent of total respondents. The respondents in the age group of 31 years and above represented 9 per cent of total respondent. In the age group of 18 years to 21 years there were only 3 per cent respondents.

Majority of the respondents were engineering students and management students, constituting 59 and 16 per cent of the total respondents respectively. Health sciences and social science students constituted 8 and 4 per cent respectively. 12 per cent of the respondents were from other fields of study.

31 per cent of the respondents have family annual income between 5,00,001 to 10,00,000 that is represented in majority. 37 per cent of the respondents have family annual income between zero to 5,00,000. 8 per cent of the respondents have family annual income between 15,00,001 to 20,00,000. 3 per cent respondents have family annual income that is 20,00,001 and 25,00,000.

29 per cent of the total respondents belong to metro areas. 33 per cent of the respondents are from urban areas and are represented in majority. 20 per cent belong to semi urban areas. Rural and semi rural areas were represented by 12 per cent and 5 per cent of the respondents respectively.

Sampling technique

In 2015, Quota sampling which is a non-probability sampling technique was used to determine the sample. Following this opinion, “elements are selected to ensure that the sample represents certain characteristics in proportion to their prevalence in the population” (Schutt, 2008, p.p.171). Education level and field, income group, place of origin were the characteristics taken into account while sampling. The survey was conducted and administered online.

For Group 2, data was also collected by the non-probability sampling technique. However, in this case, a method called Snowball sampling was also adopted in order to increase the number of respondents which was initially very small. Snowball sampling may simply be defined as:

A technique for finding research subjects. One subject gives the researcher the name of another subject, who in turn provides the name of a third, and so on (Gilbert, 2001, p.p.1). Thus, the primary respondents were asked to forward the questionnaire to Indian students in their network at the foreign universities. Snowball sampling is mainly used by researchers to reach subjects that are difficult to locate primarily. This sampling technique is known to work as a “chain referral”.

In 2016, the process previously adopted to collect data for Group 1 was repeated. Group 2 data was however, collected through a different approach. Firstly, the composition of the flow of Indian students to different countries was studied, using the information available at the UNESCO’s Institute for Statistics webpage for the global flow of tertiary-level students. This was done to identify the pattern of the allocation of Indian students to the EU countries. Snowball sampling technique was then adopted where, colleagues studying in some countries of the EU were approached to fill the questionnaire and to forward it to their acquaintances that are also Indian students studying in the same host country.

Through social media networks such as Facebook, the Erasmus Students Network units of the preferred countries of destination were also contacted, so that the questionnaires could be forwarded to Indian students studying in those universities. As the response rate was initially low, the questionnaires were subsequently posted in various other Facebook groups (Indians in Europe, Indians in Sweden, Indians in Portugal, etc.). Indians in these groups also shared the questionnaire with their colleagues and friends currently studying in the EU.

Research Instrument

The primary data was collected with questionnaires using Google survey sheets. An underwriting was provided stating that the responses would not be used for any purposes other than academic and that all the information would be kept strictly confidential. In 2015, the details of the respondents for groups one and two were taken from the office of the Department of European Studies at Manipal University.

Variables

Although the study is mainly of a qualitative nature, it was important to decide on variables which are measurable and relevant. Five variables were identified in the first part of the questionnaire for Groups 1 and 2 to get the basic information about the respondent such as Age, Gender, Field of study, Annual income of the Family and where did they come from. For Group 1, the first question in the second part of the questionnaire was asked to know whether they wanted to study abroad and if they already had made plans towards that end. In group 2, the first question in the second part of the questionnaire was aimed at identifying in which countries the Indian students were currently studying in.

The study was developed on the grounds that student migration is dependent mainly on availability of jobs, possibility of higher earnings and other social factors such as family, their love for India, Indian culture and Indian work environment, that would influence a student's decision whether to settle in the host country or to return to their home country (Raveesh, 2013; Varma and Kapur, 2013; Altbach, 2014). Hence, the second part of the questionnaire for both group 1 and group 2 had similar questions to gauge whether availability of jobs played an important role for Indian students in deciding whether to return to India after completing their studies or continue to live in the host country. Questions were also asked to ascertain the importance of social factors that are capable of influencing students' decisions to stay back or return to India after completing the studies.

Statistical method

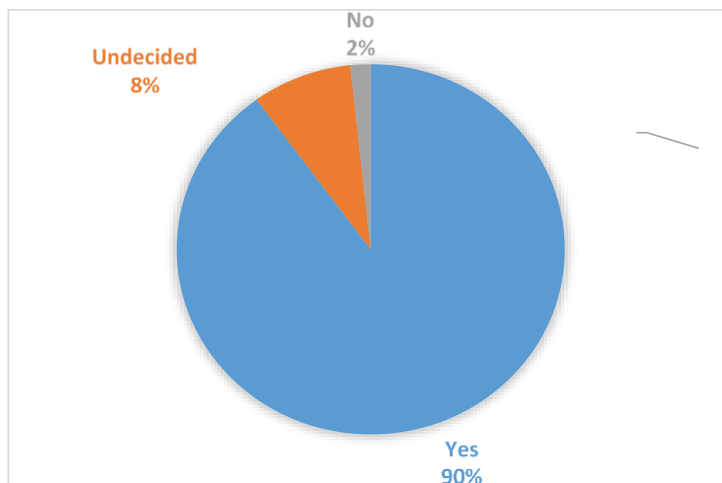
The data collected with the questionnaires was analysed using the statistical tools available in Microsoft Excel. The percentage frequency distribution method was widely used to present the results of the analysis. In this method, data is generated which specifies percentage of observations for each data point or group of it. It is a very common and widely used method to express the relative frequency responses received from respondents through survey (Lavrakas,

2008). Microsoft Excel for Windows also allows to present this data in different charts as well as in tabular form. This helps in the easy interpretation and analysis of data collected.

II . Analysis

The questionnaires were designed in a way that would help us to understand the perceptions and the mind-set of Indian students planning to pursue, or already pursuing, higher education in foreign countries. In this part, we analyse the responses of the questionnaires to achieve the objectives of this study. The survey's results point to the fact that 90% of the students in Group 1 *want* to pursue their higher education abroad, 2 per cent responded no, and 8 per cent were undecided. 90% of both males and females responded yes to studying abroad. 10 per cent of the female respondents were undecided, about 3 per cent of the males responded no, and 8 per cent were undecided. (figure A.1.).

Figure A.1. Do you want to study abroad? (Group 1)



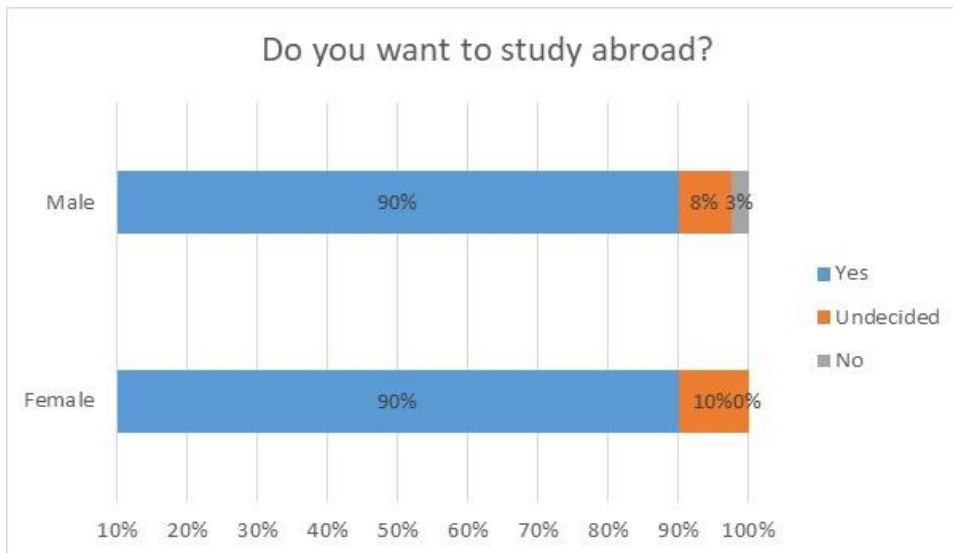
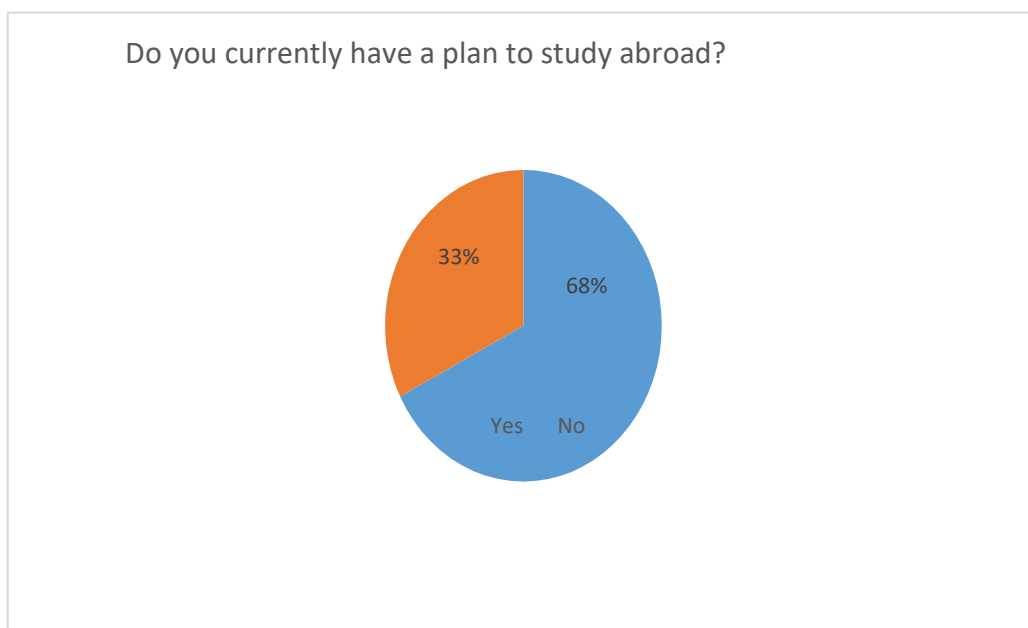
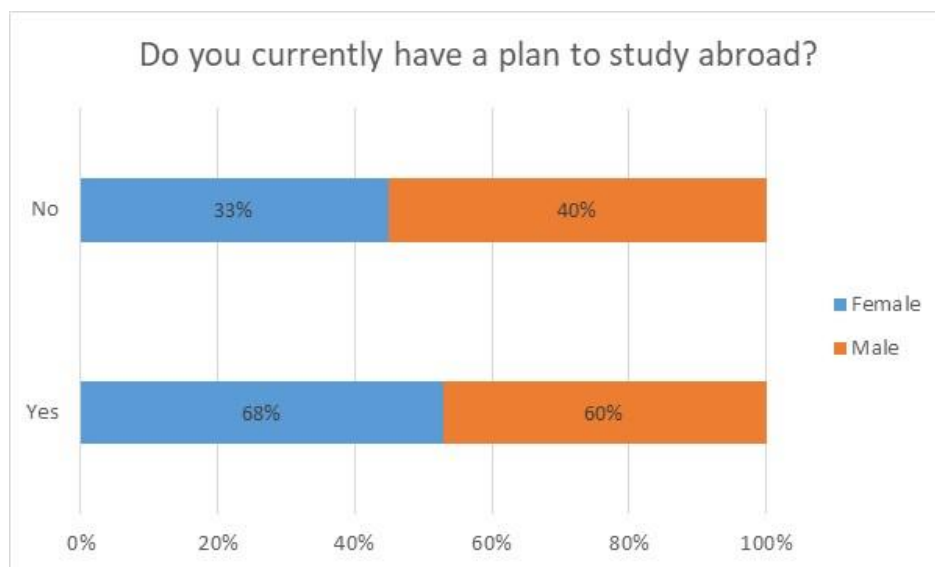


Figure A.2. Do you currently have a plan to study abroad?



68 per cent of the respondents in group 1 have a plan in place to study abroad whereas 33 per cent do not.



68 per cent of the females currently have a plan to study abroad and 33 per cent do not. Similarly 60 per cent of the males have a plan to pursue their higher education outside India while 40 per cent do not.

Students that already have a plan and those who don't but have the want to move abroad have one thing in common, their choice of preferred destination (Please refer to Figure A.3. and A.4. to see the breakdown). Out of the respondents who answered yes i.e. they currently have a plan of studying abroad are mainly going to non-European countries. After the United States (represented by 36 per cent of the respondents), Germany (29 per cent) is now the most preferred destination for Indian students.

Figure A.3. If Yes, which country are you planning to study in? (Group 1 Consolidated 15-16)

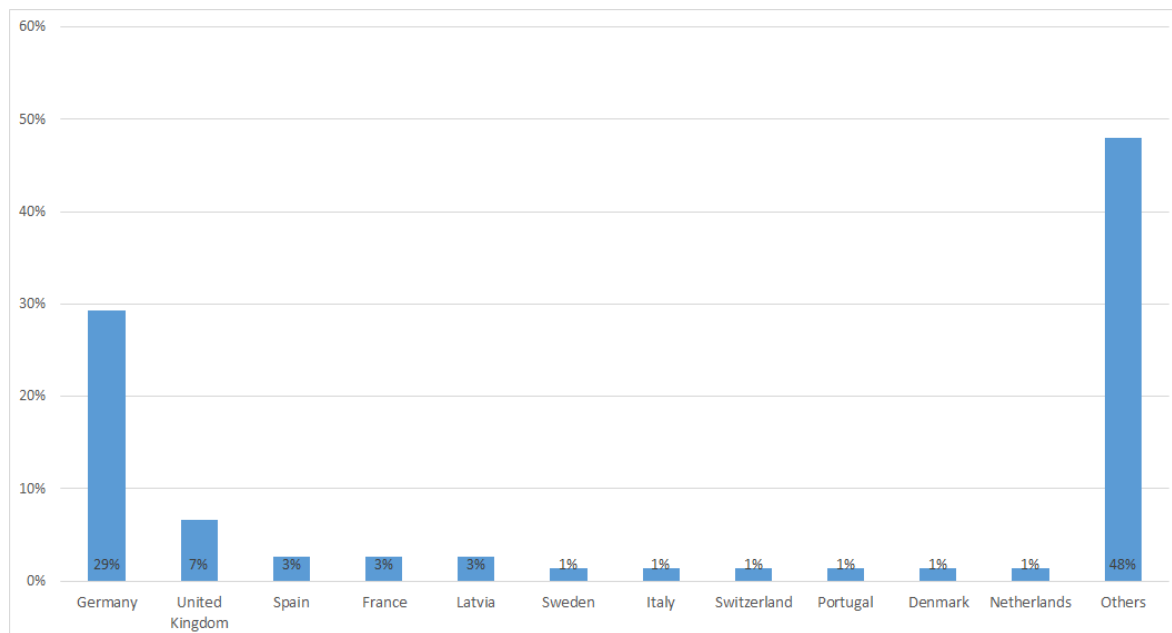
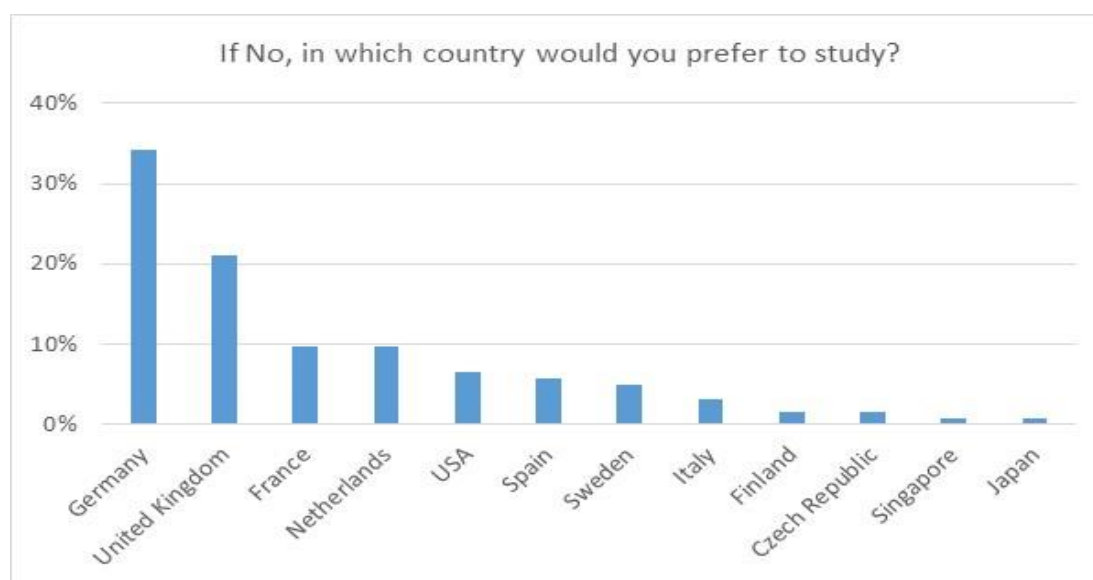
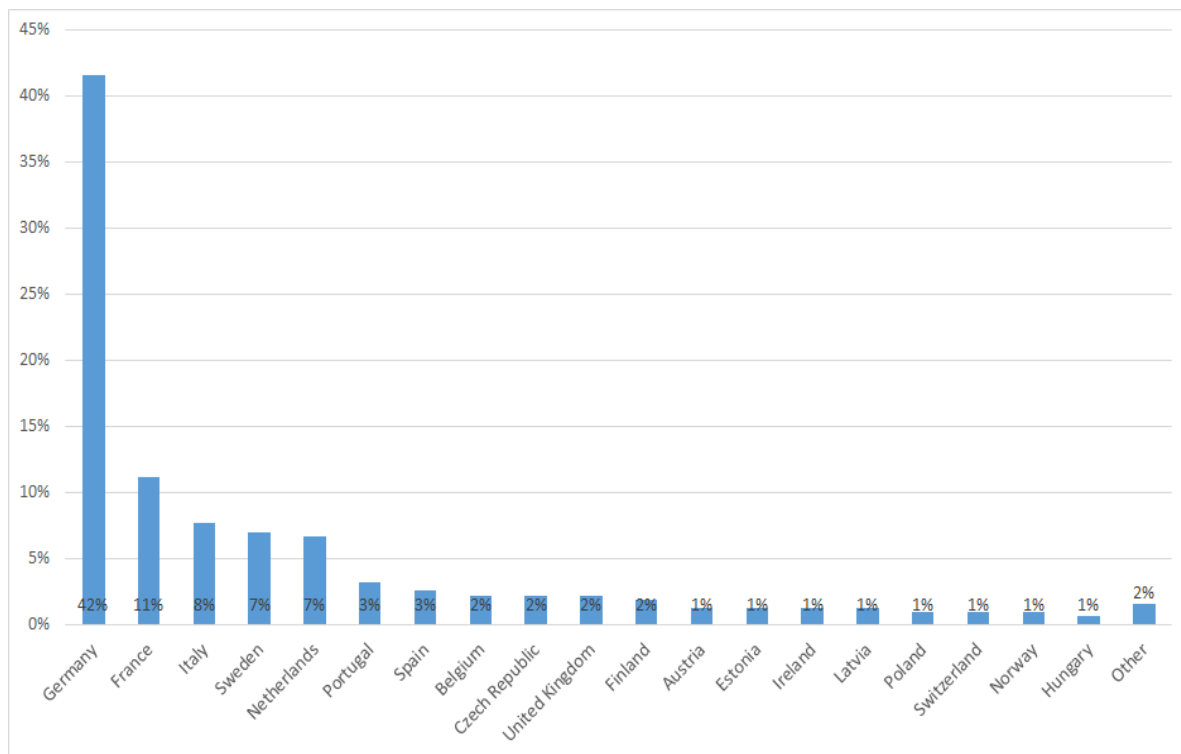


Figure A.4. If No, in which country would you prefer to study? (Group 1 Consolidated 15-16)



To respondents who did not have a plan to study abroad, but wanted to study abroad, multiple choices of countries were given to gauge their preferred destination. 34 per cent of the respondents preferred to go to Germany, followed by 21 per cent to the United Kingdom, and about 10 per cent to France and the Netherlands.

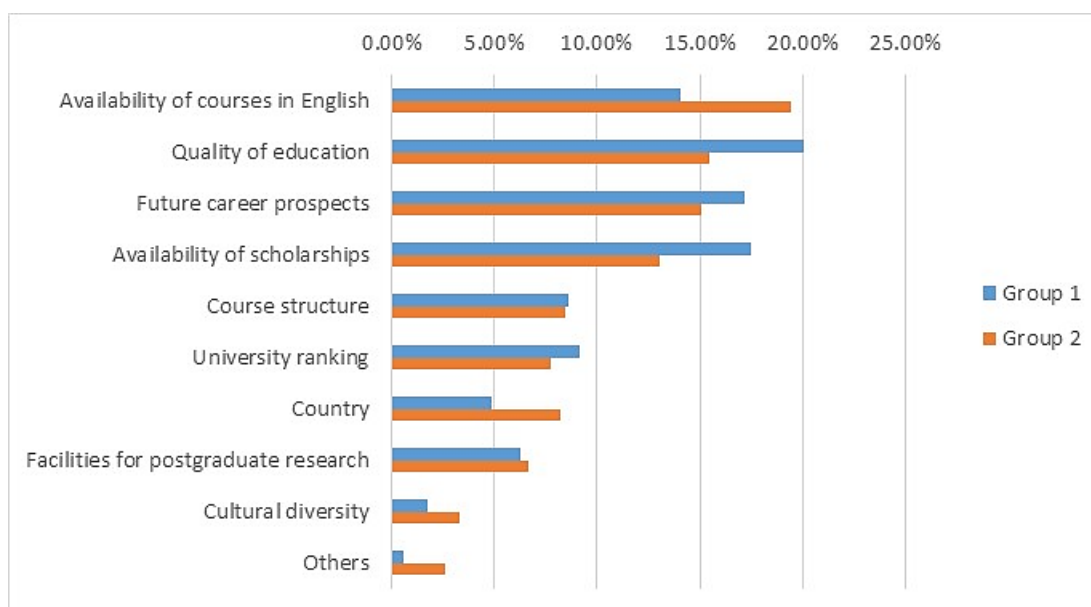
Figure A.5. Which country are you currently studying in? (Group 2 Consolidated 15-16)



In Group 2, the majority of those studying in the EU are pursuing their education in Germany (42 per cent), followed by France (11 per cent), Italy (8 per cent), the Netherlands (7 per cent) and Sweden (7 per cent) as demonstrated in Figure A.5. In this survey, it was found out that only 2 per cent of the respondents are studying in the United Kingdom. This is further supported by secondary analysis of information gathered from the literature available in support of this study. The papers by Naujoks (2009), Mukherjee & Chanda (2012), Raveesh (2013), Buga & Meyer (2012), and Thomas (2014) discuss the recent shifts in choices of destinations for Indian students to Western European countries like Germany from more traditional choices such as the US, UK, or Australia.

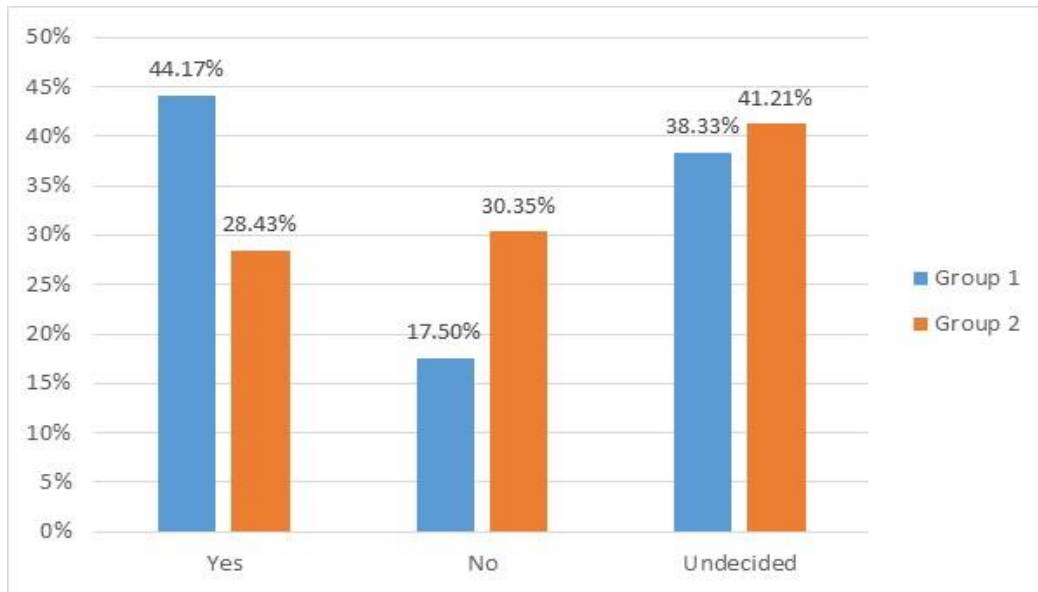
For both Groups 1 and 2, the major factors that influenced their choice for preferred destination/university were availability of courses in English, their perception of quality of education, availability of scholarships and future career prospects (Figure A.6.). These results can further be supported by Stouffer's theory of Intervening Opportunities (1940) and by Mountford's theory (1997) that discuss the reasons behind the 'want' of students to study abroad. The push and pull factors of student migration are widely discussed in the papers by Altbach (2014), Raveesh (2013), Sahay (2009), Thomas (2014), or MacGregor (2014), who talk about the different reasons of Indian students choosing to move to particular countries and what factors do they consider before making these choices, as also discussed in the literature review.

Figure A.6. Factors influential in deciding where and what to study



The majority of the respondents in Group 1 were in favour of returning to India but Group 2 was undecided about returning to India post completion of their studies (the consolidated analysis A.7.).

Figure A.7. Would you return to India after completing your studies in the host country?



44 per cent of the respondents in group 1 would return to India post completion of studies in the host country, about 38 per cent were undecided, and 18 per cent would not return to India after completing their studies. In group 2, 28 per cent students would return to India after completing their studies, 41 per cent were undecided and 30 per cent would not return.

The major factors that influenced this opinion were family and their love for India (Figure A.8.). However, for those that answered no and wanted to stay back in the host countries, the three main factors influencing the respondents' decision to stay back in the host country and not return to India are career opportunities in the host country, high earnings and higher standard of living (Figure A.9.). These factors are also discussed by Hercoq & van de Laar (2013) who also validate the network theory of migration. Responses of these two groups also mirror the observations from the literature surveyed (See: Han et al, 2015; Potnuru & Sam, 2015).

Figure A.8. If yes, which of these are the factors that would influence your decision in returning to the India?

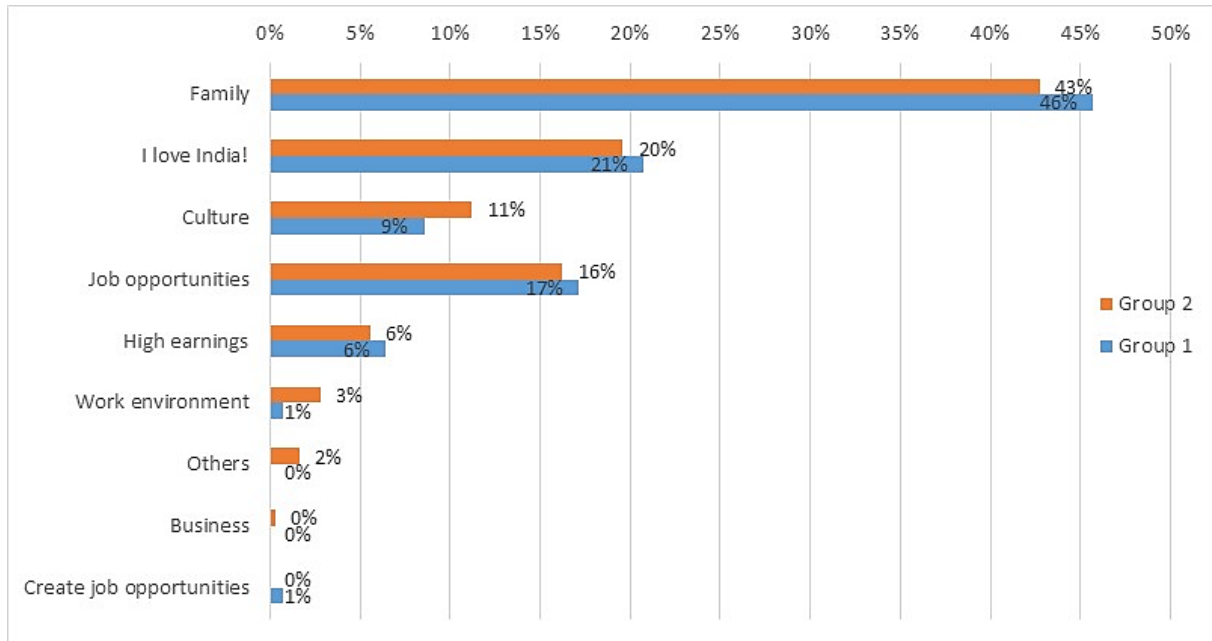
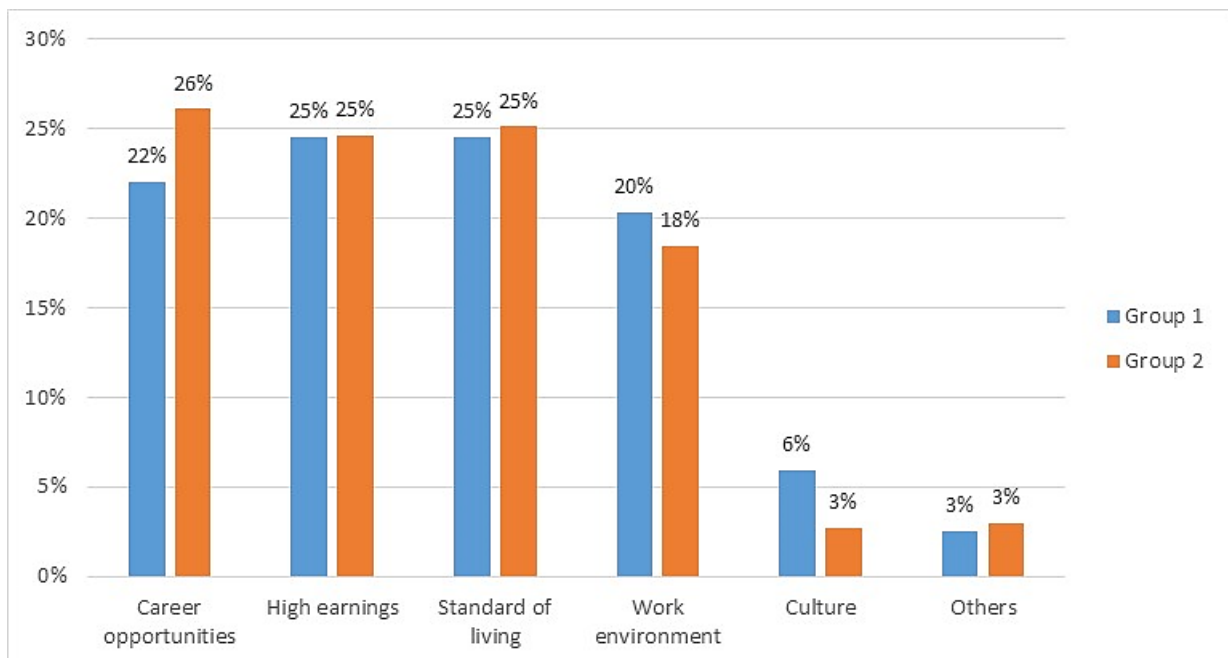
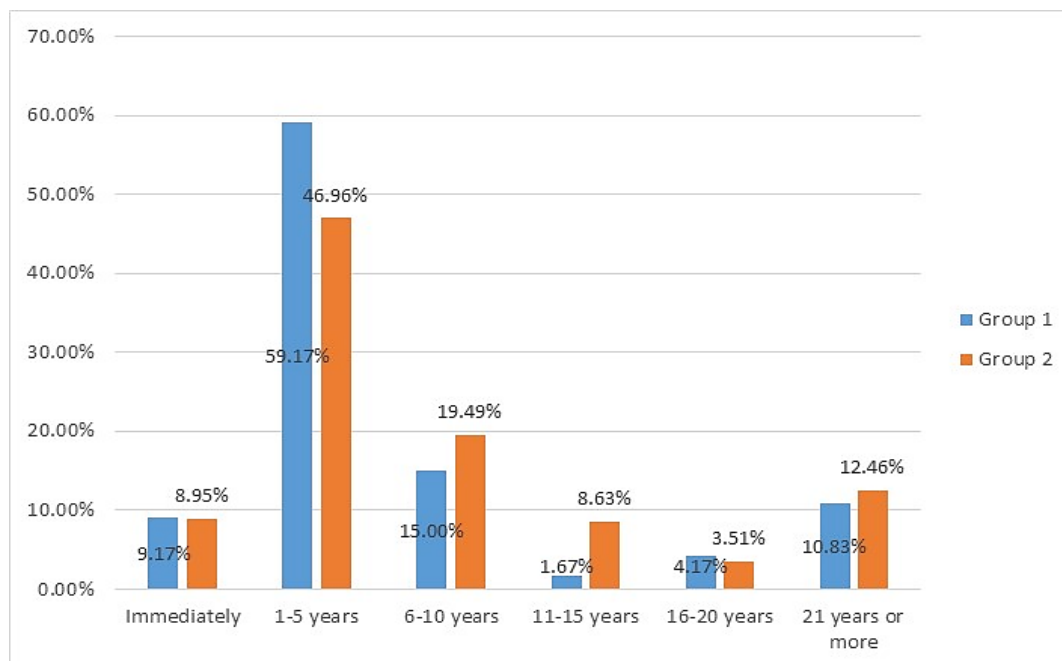


Figure A.9. If No, which of these are the factors that would influence your decision to stay back in the host country?



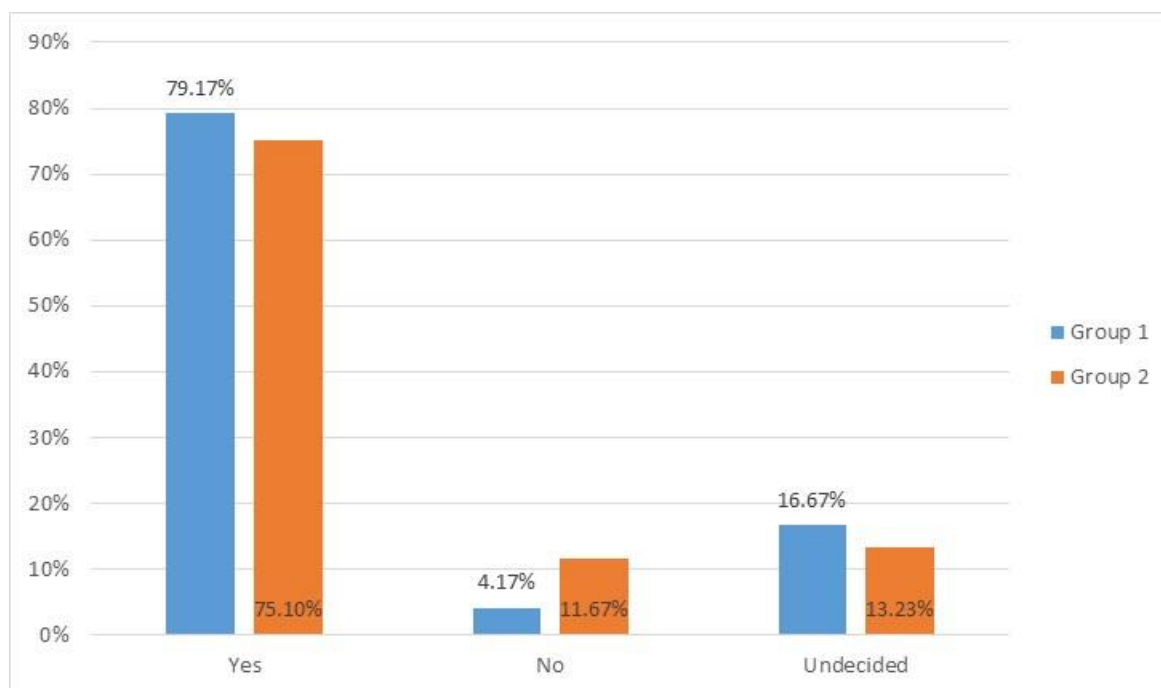
The majority of students in both groups wanted to return to India within 1-5 years post completion of their studies.

Figure A.10. After completing your studies, when are you likely to return to India?



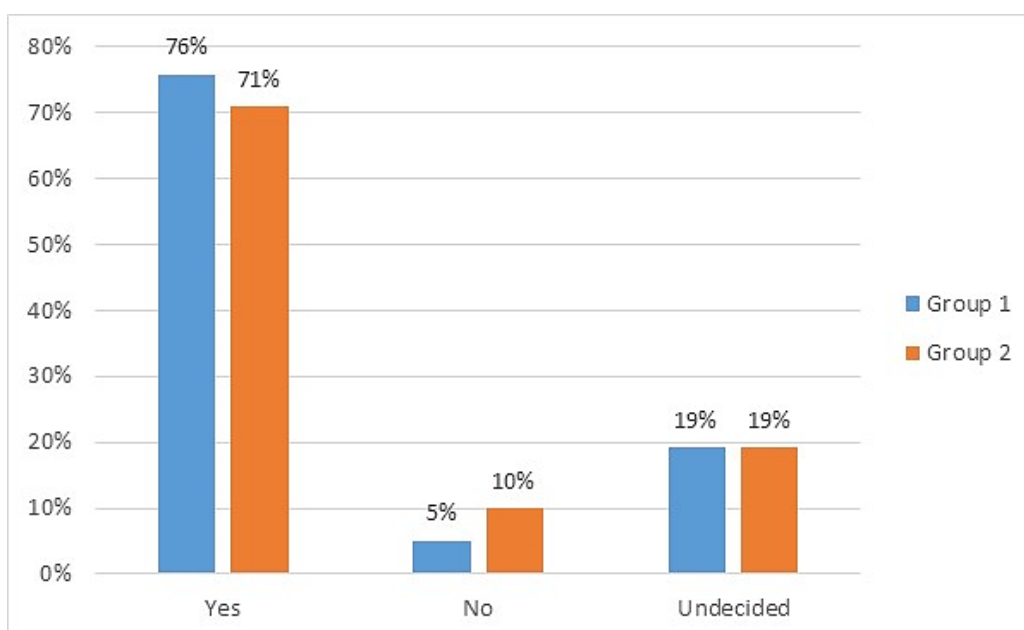
In Group 1, 59 per cent of the students, which represents the majority, would return to India in 1 to 5 years, and 9 per cent would return immediately. 15 per cent students would return in 6 years to 10 years, 4 per cent in 16 years to 20 years and 11 per cent in 21 years and more. Similarly, in group 2, 47 per cent of the respondents would return to India in 1 to 5 years. 9 per cent would return immediately, 19 per cent would return in 6 to 10 years, and 12 per cent would return in 21 years or more. This shows that opinions are similarly represented in both groups and that the majority of the students in both groups plans to return to India within 1 to 5 years of completing their studies.

Figure A.11. After completion of your studies, would you look for job opportunities in the host country?



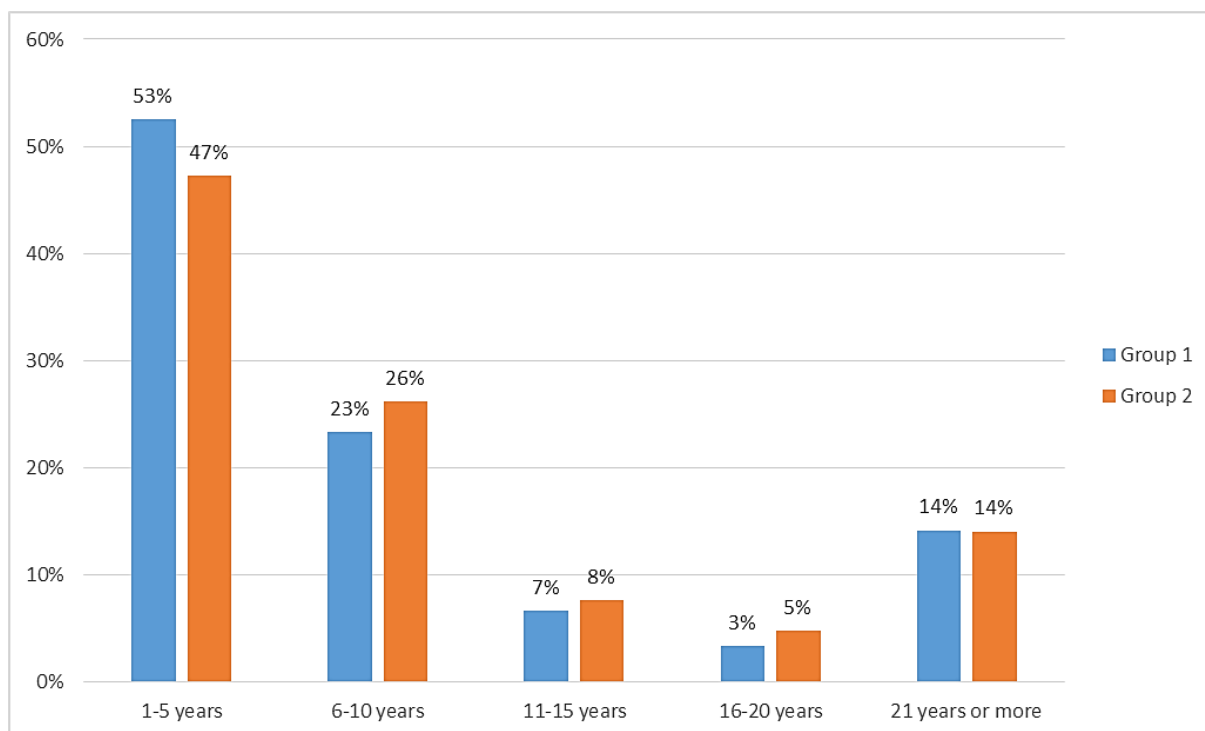
79 per cent of the respondents in group 1 responded that they would look for job opportunities in the host country after completing their studies, 4 per cent would not and 17 per cent were undecided. In group 2, 75 per cent of respondents would look for job opportunities, 13 per cent would not, and 12 per cent were undecided.

Figure. A.12. If you get a job after completing your studies, would you stay back in the host country?



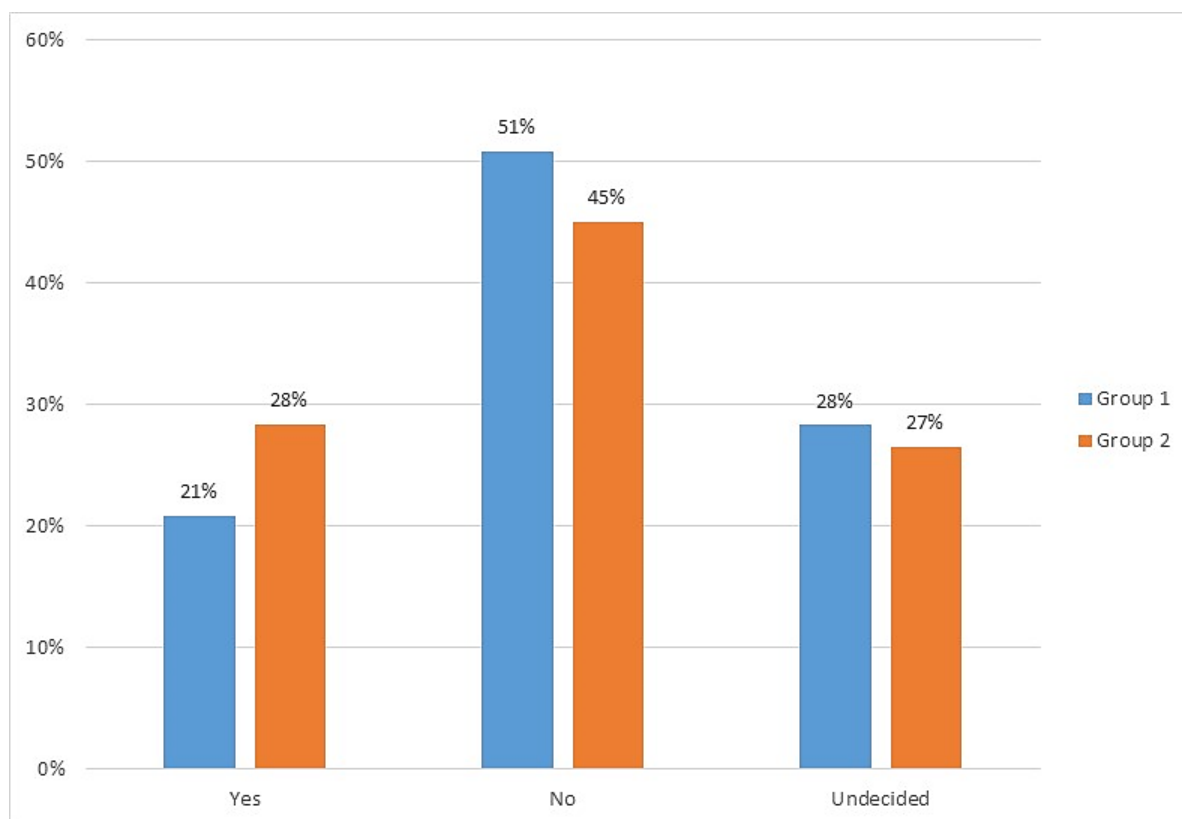
76 per cent respondents in group 1 would stay back in the host country if they got a job in the host country, compared to 71 per cent respondents in group 2. 19 per cent respondents in both groups remained undecided. 5 per cent respondents in group 1 and 10 per cent in group 2 responded they would not stay back in the host country even if they got a job and would return to India.

Figure. A.13. If you get a job, when are you likely to return to India?



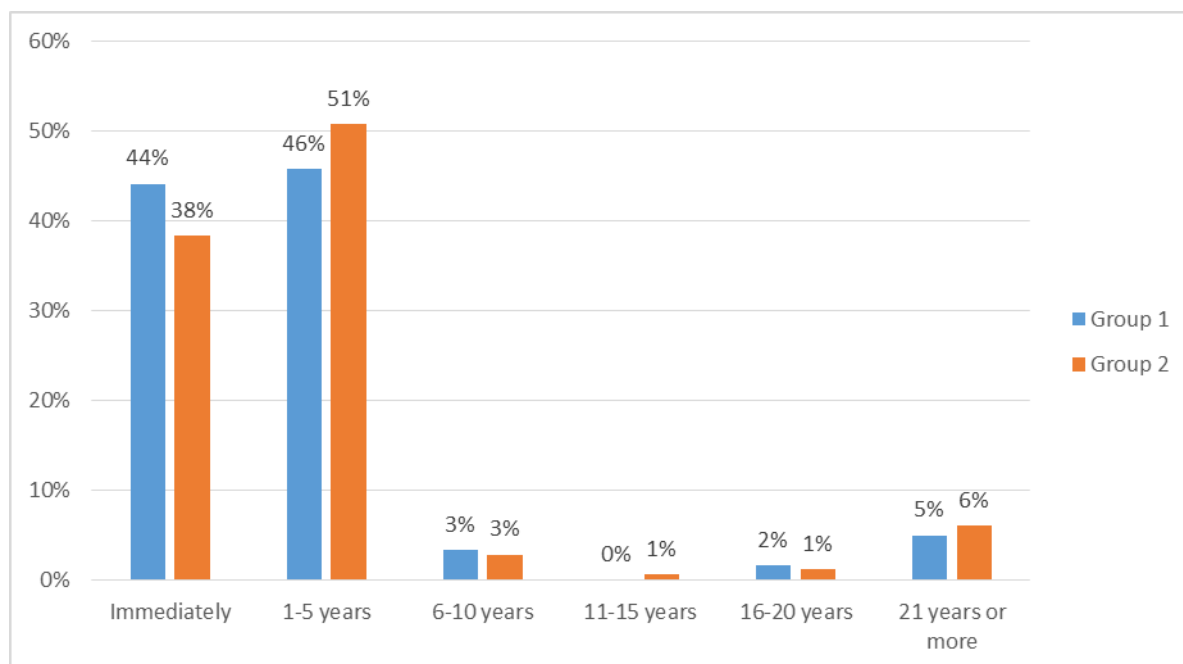
53 per cent respondents would return to India in 1 to 5 years even after getting a job in the host country, 23 per cent in 6 to 10 years, 7 per cent in 11 to 15 years, and 3 per cent in 16 to 20 years. However, in group 2, 47 per cent respondents would come back to India in 1 to 5 years even after getting a job in the host country, 26 per cent in 6 to 10 years, and 8 per cent in 11 to 15 years. In both groups, 14 per cent of the respondents said they would return in 21 years or more, that shows that they would like to settle in the host country.

Figure A.14. If you do not get a job after completing your studies, would you still stay back in the host country?



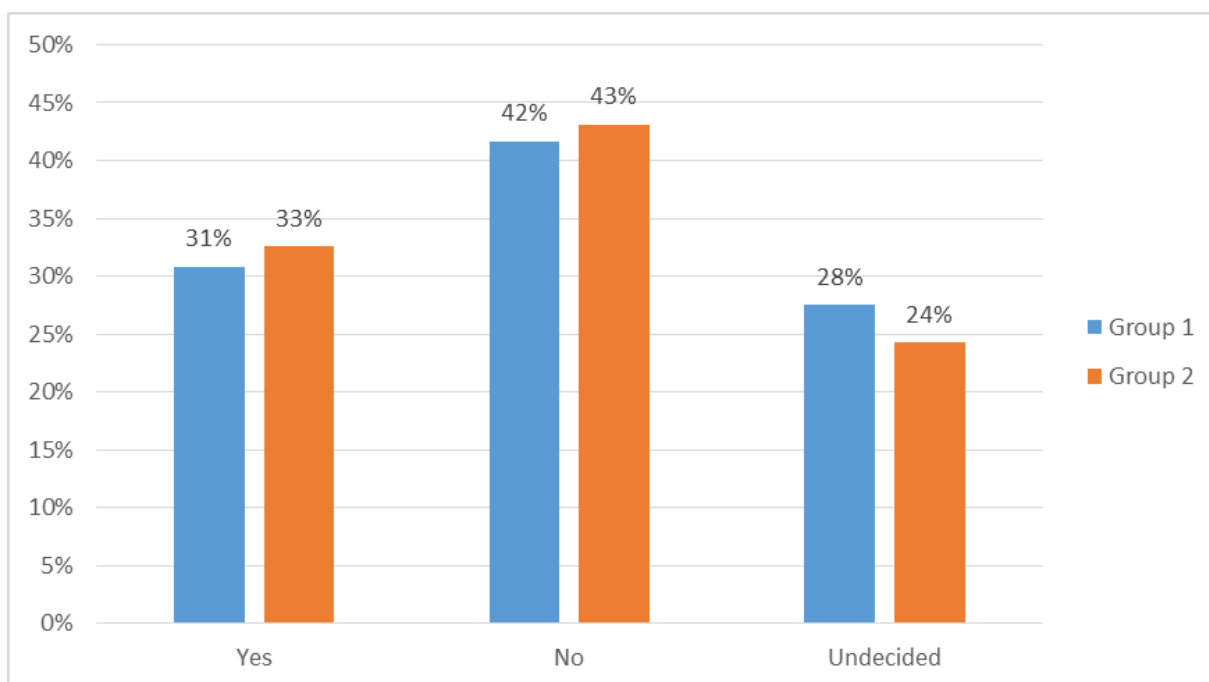
51 per cent respondents in Group 1 would not stay back in the host country if they did not get a job in the host country after completing their studies, 21 per cent would stay back even without a job, and 28 per cent were undecided. In group 2, 45 per cent of respondents would return to India if they did not get a job after completing their studies in the host country, 28 per cent would stay back in the host country even after not getting a job, and 27 per cent were undecided

Figure A.15. If you do not get a job, when are you likely to return to India?



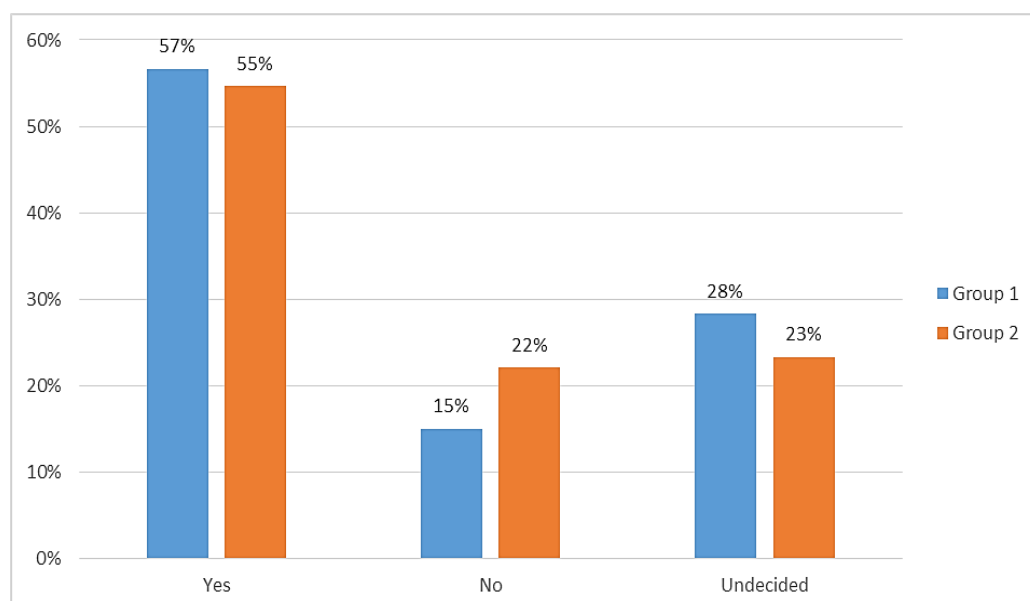
44 and 38 per cent of the respondents in groups 1 and 2 respectively would return to India immediately after completing their studies if they did not get a job in the host country. In Group 1, 46 per cent of the respondents would return to India in 1 to 5 years, 3 per cent in 6 to 10 years, and 5 per cent in 21 years or more. However, in group 2, the remaining 51 per cent of the respondents would return to India in 1 to 5 years if they did not get a job in the host country, and 3 per cent in 6 to 10 years.

Figure A.16. If you get a job in the host country, would you still prefer to return to India?



In group 1, 31 per cent of the respondents would still prefer to return to India even after getting a job in the host country, 42 per cent would not, and 27 per cent were undecided. In group 2, 33 per cent of the respondents would still prefer to return to India even after getting a job in the host country, 43 per cent would not, and 24 per cent were undecided.

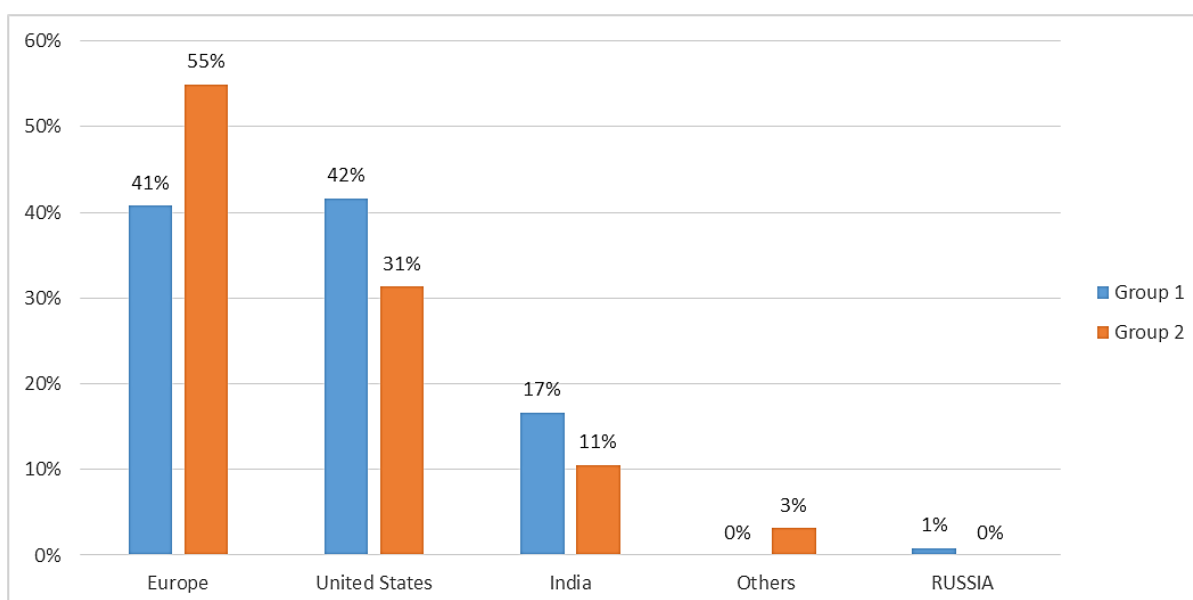
Figure A.17. Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?



57 per cent respondents in group 1 would return to India after completing their studies if they would find a job in India based on their educational qualifications or area of specialization, 15 per cent would not, and 28 per cent were undecided. In group 2, 55 per cent of the respondents would return to India, after their studies completed, if they would find a job in India based on their educational qualifications or area of specialization, and 22 per cent would not.

The majority of students perceived that Europe has better job opportunities for them based on their educational skills or areas of specialization but they would still return to India if they were to find a job in India that was in line with their educational skills attained or pertained to their area of specialization. Greater number of students felt that the main reasons for students leaving India to study abroad were a possibility of the availability of job opportunities in their areas of specialization, possibility of higher earnings, better quality of education and an overall higher standard of living.

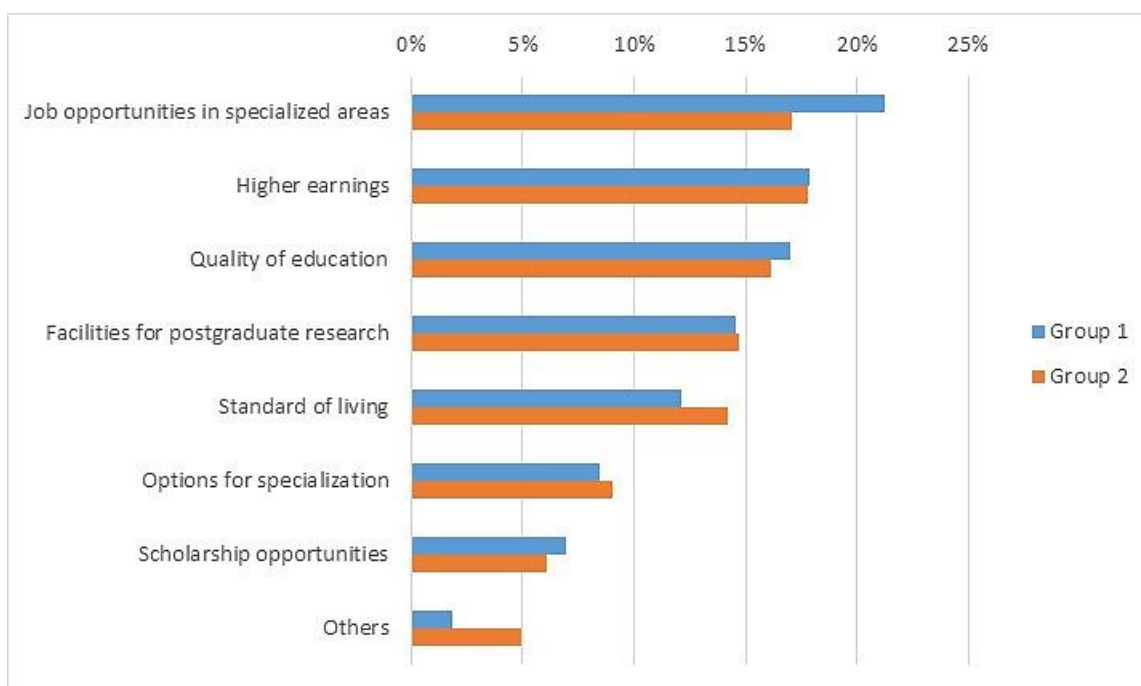
Figure A.18. Based on your educational qualifications/area of specialization, where do you see better job opportunities?



41 per cent of respondents in group 1 feel there are better job opportunities in Europe based on their educational qualifications or area of specialization, 42 per cent feel better job opportunities are in the United States, followed by 17 per cent who feel India has better job opportunities. In group 2, 55 per cent of respondents feel there are better job opportunities in Europe based on

their educational qualifications or area of specialization, 11 per cent feel India has better job opportunities, followed by 31 per cent respondents who feel the United States has better job opportunities.

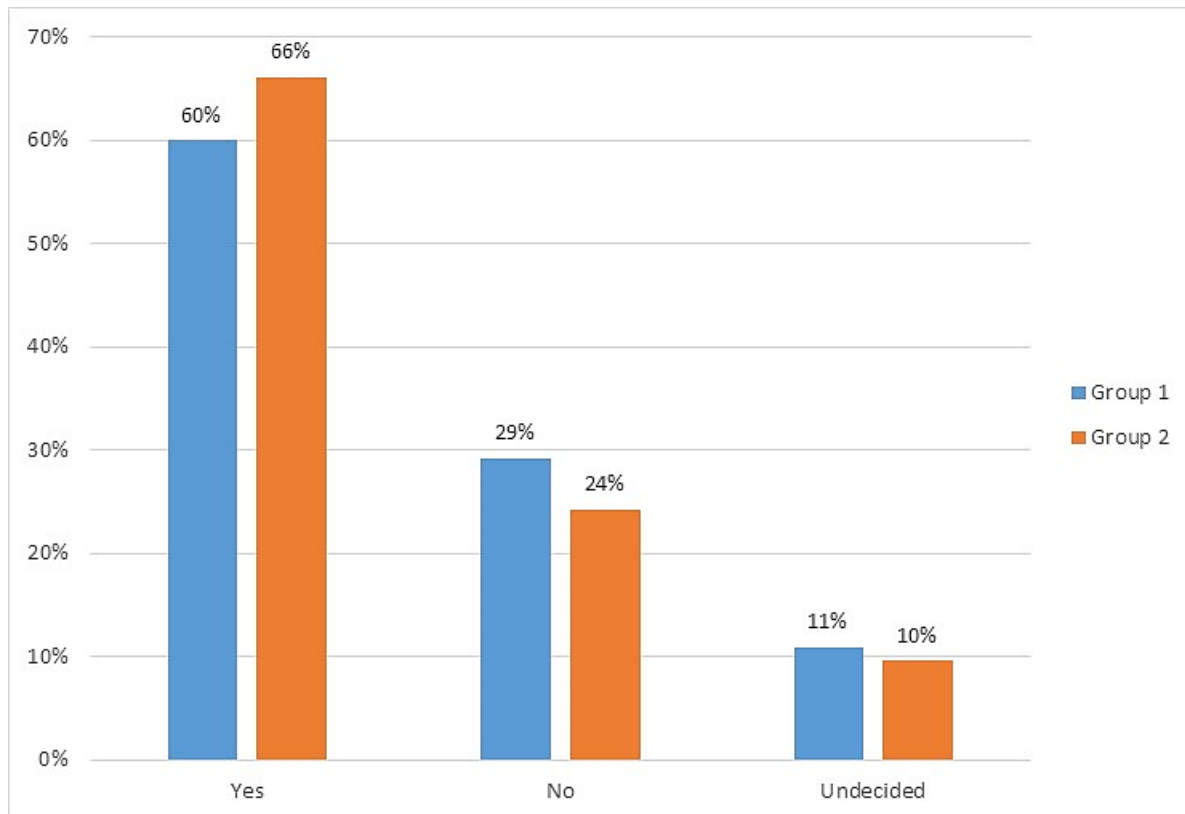
Figure A.19. What does India lack that could be the main reasons for emigration of Indian students?



According to respondents in both group 1 and 2, the three main factors that could be the reasons for emigration of Indian students to foreign countries are lack of job opportunities in specialised areas, possibilities of higher earnings and quality of education provided by foreign universities. Also, many respondents believe that facilities for postgraduate research provided by foreign universities and institutions are better than those in India and this could also be an important cause of emigration for Indian students.

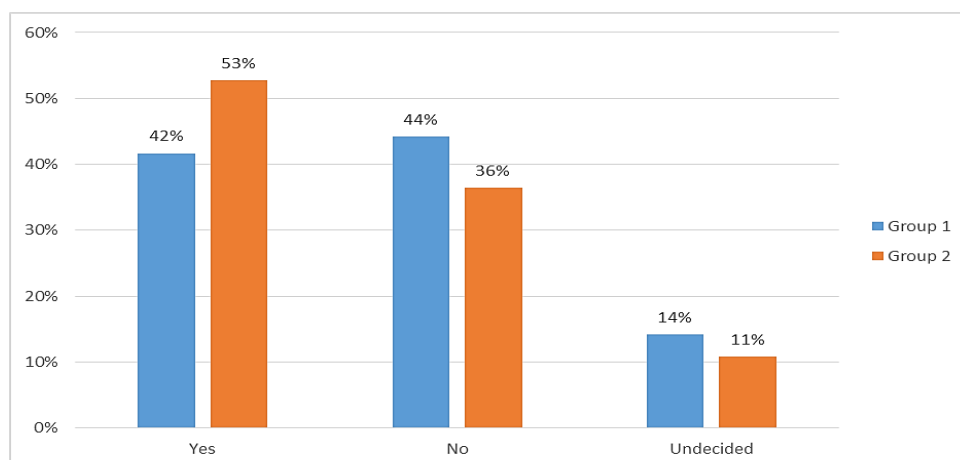
The majority of Indian students would have still chosen to study abroad even if their educational degrees were recognised internationally. However, most respondents were also of the opinion that they would not have chosen to study abroad had Indian universities provided quality of education that was at par with foreign universities. Sahay (2009) has also expressed similar opinions and pointed out that due to more opportunities in India, more Indian students are opting to attain higher education in India. Higher earnings and better social benefits were the major reasons that could influence Indian students to permanently settle in the host countries.

Figure A.20. If all Indian educational degrees were internationally recognized, would you still want to study abroad?



60 per cent of respondents in group 1 would still want to study abroad even if all Indian degrees were internationally recognized, 29 per cent would not, and 11 per cent were undecided. However, 66 per cent of respondents in group 2 would still want to study abroad, even if all Indian degrees were internationally recognized, 24 per cent would not, and 10 per cent were undecided.

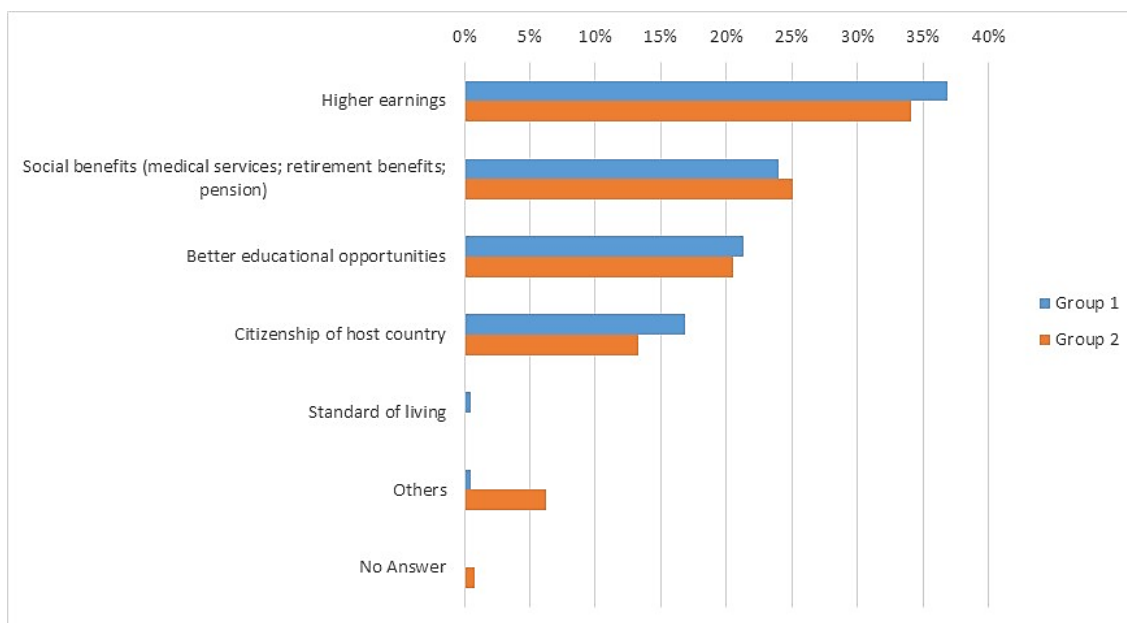
Figure A.21. If quality of education in India was at par with international universities, would you still want to study abroad?



42 per cent respondents in group 1 would still want to study abroad if quality of education in

India was at par with international universities, 44 per cent would not still prefer to study abroad, and 14 per cent were undecided. In group 2, 53 per cent of the respondents would still want to study abroad if quality of education in India was at par with international universities, 36 per cent would not prefer to do it, and 11 per cent were undecided.

Figure A.22. From the following which factors according to you would be influential in choosing to permanently settle in the host country?



According to respondents in groups 1 and 2, the main two factors that would be influential in choosing to permanently settle in the host country are higher earnings and social benefits.

For a detailed analysis and a breakdown of individual figures for the years 2015 and 2016. Please see Part 1 and Part 2 in the Annexure.

III. Major Findings

The study reaffirms several facts about Indian student migration to the European Union. Referring to the main questions and the purpose of carrying out this particular study, the results that have come into light present some very interesting data. From the data analysis and interpretation of results concluded in the above part, we refer to the results to answer the main research questions and achieve the aims of this study.

Indian student migration is dependent on economic factors and social factors. Economic factors such as availability of jobs and possibility of higher earnings are influential factors that push Indian students to stay back in the host countries and observing the results of the survey, this holds true. A temporary brain drain in India is seen where students do manage to find jobs and stay back in the host countries and a temporary brain gain is seen in the host countries of the EU. However, during this phase India stands to gain from high remittances and the host countries tend to gain from the availability of highly skilled workers (Han et al, 2015; Potnuru & Sam, 2015).

Where students do not find jobs and return to India immediately after completing their education, there is high brain gain in India as it tends to gain from the return of students, that come back with innovative skillsets and more efficient work practices, that in turn helps in the development of India through better quality of research and also through innovative solutions to India's infrastructural and developmental issues. In this scenario, the host countries are affected negatively as they fail in the 'brain retention' of these Indian students (Potnuru & Sam, 2015).

From the findings of this study, what we are seeing is a 'brain circulation', however, ultimately majority of the Indian students that have stayed back are choosing to return to India within five years of completing their studies, as seen from the results of the survey. This validates the assumption that Indian students want to return to India post completion of their studies in the EU and that India-EU student mobility would lead to a reverse brain drain in India if this trend continues.

Discussion

In this section we discuss the objectives of the study reached through the results of the survey and the secondary information analysed. We discuss the want of Indian students for studying abroad, i.e. in the EU, the shift in choice of destinations, the factors that have influenced this and the current status and impact of the recent trends of India-EU student migration, what we can learn from the current scenario and take policy measures to better this situation. We discuss the India-EU student mobility, also considering Indian students' traditional choices and an overall shift in the current scenario of student mobility in terms of return migration or brain gain in India.

Firstly, we address the notion of why do Indian students want to move to different countries of the world. The answer is simple: the youth of India today does not believe in making compromises and wants the best quality of education. The higher education of India is seriously lagging in this regard, and has fallen below the world average in quality. The Indian Institute of Science is ranked between 251-300 and there are no universities in the above 200 mark. The Indian Institutes of Technology and the Indian Institutes of Management are ranked even below, followed by other central universities (Times Higher Education (THE), 2017, rankings for 2018).

For the current Indian student population, the number of higher education institutions available in India is quite inadequate. Fierce competition in enrolments in Indian universities, coupled with the Indian reservation system which although advantageous for minorities, is a major problem for students not belonging to these minority quotas. Lack of courses allowing specialization in different fields, lack of further research options, overcrowded classrooms with understaffed faculty, underfunded infrastructure, difficult entrance exams for university enrolments and further for jobs in the public sector and government services and institutions, etc. are some of the main reasons for Indian students choosing to move abroad (Thakur, 2012) (Thorat, 2017).

English is widely spoken in India and so, traditionally Indian students choose to move to English-speaking countries where courses would be taught in the language. This is why universities in the United States, the United Kingdom, Australia, Canada and the New Zealand have been preferred until now. However, since the mid 2000s, shifting preferences have brought to light choices for Western European and South-East Asian countries. Germany is now contending with the UK for the top spot of net Indian student immigration. This trend is not quite surprising considering the shift in many policies affecting Indian students' decisions in choosing to study in the UK.

Considering the population of the survey conducted for this study, we saw that the majority of the students belonged to middle-income class families in India who wanted to move abroad for higher education. We also consider the two theories by Stouffer and Mountford's, which states that students tend to consider the costs to be paid for attaining higher education and the possible benefits to be reaped, before deciding to emigrate. The benefits here (according to the survey) are future career prospects in terms of availability of jobs, opportunity to gain valuable experience and possibility of higher earnings as compared to earnings in India.

Attaining higher education abroad is basically an investment (consider the amount of expenditure) for Indian students and the profits to be gained are the benefits discussed previously. Although a number of direct fully-funded scholarships, tuition fee waivers, Erasmus Mundus scholarships, etc. are available to Indian students, the majority of these students fund their studies by obtaining an educational loan from Indian banks or other funding institutions and schemes. Only very few students have the ability to fully-fund their education. The main purpose for these students to find a job in the host country is to enable faster pay- back of these loans, gaining experience along the way (Mukherjee & Chanda, 2012).

This is also the main reason behind the recent trends of Indian student migration. Many of these students are now forced to reconsider their plans for higher education, in terms of destination. It is not just the UK that is seeing a decline in enrolments of Indian students; the US that holds the largest share of Indian student immigration, has seen a sharp decline in enrolments and this is also the situation in Australia. The reason behind this is that these English speaking countries have enjoyed a constant flow of funds and premiums through tuition fees which are three times more for foreign students as compared to their own students. These countries are sooner or later going to feel the full economic implications of the decline in enrolment in universities

(Mukherjee & Chanda, 2012).

In comparison to conditions in the UK, the other EU member states charge lower tuition fees for attaining higher education for e.g. Greece, Italy, and Portugal. Some EU countries such as France and Germany do not differentiate between foreign students and their own students. They charge the same amount of fees as mostly universities in France and Germany are funded by the government, which enables the Indian students to receive a highly subsidized education. Finland too provided similar benefits until recently when they changed their educational policy for foreign students (in terms of tuition fees). This attracts many Indian students who are otherwise greatly impacted when the expenditure is unaffordable. The universities have also started including more number of English-taught courses to attract foreign students and also issue many scholarships funding the living expenses in the host countries (Mukherjee & Chanda, 2012).

Since 2012, the UK changed its immigration policy whereby it scrapped the policy of visa extension allowed up to two years for students finishing their studies, to allow them time to look for a job and changed it to Tier 2 status under which students wishing to stay back need to have already found a job that pays a minimum of £20,000. This has had a major impact on enrolments in universities in the UK that have registered a sharp decline in enrolments by 30% in London (Vaidyanathan, 2013) (The Times of India, 2017). BREXIT too has had an impact on the students' decisions of enrolling in UK universities. Although a currency devaluation was thought to be beneficial for Indian students making studying in the UK less expensive, the changed visa and immigration has continued to ensure the fall in numbers of Indian students enrolling in UK universities (Kohli, 2016). As per the Office of National Statistics (ONS), quoted by the Times of India in August 2017, *"Indian students accounted for approximately 9,600 visas granted in 2016 (or 7 per cent), but in 2010 they accounted for around one in five of visas granted at 40,500, the figures said"* and *"Between April 2016 and April 2017, as many as 7,469 Indian students left before the expiry of their student visas with only 2,209 choosing to extend their visas to remain in Britain"* (Times of India, 2017). Also see Tables 3.2 and 3.5 to understand the decrease in student inflows to the UK which clearly shows the negative effects of the changed immigration policy.

The United States on the other hand, seems to have lost the interest of not only Indian students, but also of Chinese students. Chinese students represented the largest student population in US universities followed by Indian students. Frequent student visa denials, hate crimes, anxiety about unclear and possible changes to visa and immigration policy and the optional practical

training program that allows students to work on their student visa for up to 3 years, possible extension of the travel ban to include more countries, etc. are some of the major concerns for these students (The Times of India, 2017) (Mervis, 2014). Furthermore, Donald Trump government's ban on travel for nationals of Muslim countries has made an impact on Muslim students in India too, who are forced to no longer consider the US for higher education (Chowdhury, 2017).

Australians too have a perception that their government is allowing too many Indian students to enrol in their universities who then later take their jobs, resulting in racism and attacks on Indian students. However, this was the case in 2009 post which Australia too saw a decline in enrolments. Recently though, Australia launched the Skilled Graduate Visa Scheme, allowing foreign students to stay back in the country for 2-4 years to look for a job and reduced the minimum financial requirements for applying a visa (Clark, 2013).

Canada is on the right track in terms of foreign students' enrolment, has seen a steady increase in students' enrolment rates (along with New Zealand and Germany) and may soon be the second most popular country for foreign students' immigration. Its reform in immigration brought it into spotlight and allows students to stay up to 3 years with a work permit and allows them to be eligible for residency after working just for 12 months (Clark, 2013).

The EU is soon going to consist of 27 member states post BREXIT which means that Germany would replace the UK as the top immigration country for Indian students. Although Germany does not have many courses available in English, the fact that it allows students to stay on for 18 months after graduating, not necessarily with a job, has made it very attractive for Indian students (Please see Tables 1.2 and 2.2 to understand the increase and decrease in Indian student inflows to Germany and the UK respectively). Coupled with the fact that German public universities do not charge tuition fees, has many options for scholarships, and has beneficial trade agreements with India through which India plans to use Germany's model of dual education system and Germany plans to tap into India's highly qualified workforce that come to study in Germany, especially in the Science, Technology, Engineering and Mathematics (STEM) fields. *"The two nations recently signed a partnership deal in higher education that will strengthen these ties even further by supporting joint research and collaboration between students and doctoral candidates"* (Senft, 2017).

Other countries of the EU are also attracting Indian students by providing programs that either don't have any tuition fees or have a very nominal and subsidized cost of living, such as in Sweden, Netherlands, Schengen member Norway, and previously in Finland. France and Italy too, have managed to attract Indian students and are also seeing a steady increase. France wants to attract the best talents from all over the world as it too is facing shortage of labour in specialised areas (Mukherjee & Chanda, 2012). However, France has recently signed an agreement with India where by it would allow Indian students to stay back in the country by granting residence visas to search for a job up to 2 years (Smith, 2015). Portugal too, has signed a cooperation agreement with India in the framework of Startup Portugal and Startup India, whereby it would issue startup visas to Indian entrepreneurs, however, this is in the phase of processing and has not started yet (Guerrini, 2017). The EU overall has enhanced student mobility between India and EU member states through various programs such as the Erasmus Mundus, now Erasmus+, cultural studies exchange scholarships, etc. We have established that education and other schemes in the EU (apart from UK) is drawing the attention of Indian students. Then what are the reasons behind Indian students unable to find jobs in the host countries and are increasingly returning to India?

This is because of many reasons, for e.g. though Germany has many different programs benefitting Indian students and encouraging student mobility, there are also cases of racism of which some are reported but most are not. It is necessary to mention the violent attack on Indian students at the University of Jena. Major host countries of the world are under the impression that the students take away local jobs and so should return to their countries, influencing policies of national governments in a similar fashion (Chowdhury, 2017).

However, in reality, Indian students are known to work for private sector/public sector for a maximum of five to six years and then invest in a business or start an endeavor of their own in the host countries, thereby employing citizens of that country along with paying high taxes and managing to earn profits (Goswami, 2017). The EU member states are also facing external pressures due to the migration crisis and not all countries of the EU are capable enough to handle such a grave situation. However, majority of these migrants that are fleeing from war-torn areas or are climate change refugees are semi skilled and low skilled and would naturally take a long time to integrate in the society and enhance their skills. Whereas Indian students are a readily available pool of highly qualified workers that the EU member states have so far failed to retain (Potnuru & Sam, 2015).

These students are going back to India after completing their degrees, even though the host countries are facing high levels of unemployment along with labour shortage in specialised areas where highly skilled professionals are required, declining birth rate and a large ageing population (Lee, 2012). Strict immigration policies, difficult rules to hire non-EU workers, difficulty in accessing work permits, minimum wage earning slabs, language barriers, inability to integrate in the host country, homesickness, etc. are making it extremely difficult for Indian students to find a job and settle in the host country (Potnuru & Sam, 2015) (Chowdhury, 2017).

Visas, residence permits and the EU Blue Cards (an initiative launched by the Council of the EU to facilitate hiring of highly skilled workers), are granted by national governments of EU member states. If an individual does not possess the EU Blue Card, a work permit is required but is valid only in the issuing country due to which a worker cannot move to a different EU member state and work there. This is possible under the blue card, however, strict eligibility conditions make it extremely difficult to acquire this. In comparison to the blue card scheme, the US immigration policy for transitioning from student to worker was easier (Potnuru & Sam, 2015).

To be able to retain these students, the EU needs to have a flexible immigration policy, recognise educational degrees and certificates, to ensure a smooth transition process from student to worker (Junor & Usher, 2008, p.p. 4-8). This would allow the diaspora to form scientific and business communities that will not only facilitate business, research and development in different areas between India and the EU, but going by the Network Theory, also attract more Indian students to study in the EU by forming a dynamic network. The India-EU mobility needs to be given more attention via some policy measures, outreach methods and effective communication, because currently there is a lukewarm response from the Indian students to study in the EU even after the many opportunities available, especially in specialized areas. If the EU continues to neglect the availability of Indian highly qualified workers and lets them go back to India, then the EU will be the one at loss (Potnuru & Sam, 2015).

India on the other hand, needs to be prepared to be able to accommodate returning students by providing ease of access to jobs and to recognize the different degrees issued by EU member states (Junor & Usher, 2008, p.p. 4-8). The quality of Indian education needs to be at par with international universities so that India can stop students emigrating at the root; if not, continuing emigration would lead to future brain drain in India because of the mass highly skilled workers continuously emigrating, especially where the education is funded via different national schemes. Currently, India has adopted some measures that would ensure better quality of education in the

future such as combining the two overlapping regulators University Grants Commission and the All India Council for Technical Education into one regulating body that would facilitate ease of governance and decision-making along with a positive effect on sharing of resources (Custer, 2017).

China is the largest source of students in foreign universities especially in the US, UK and other European countries, but a few years ago the Chinese government took measures to stop the negative effects of brain drain and to make Chinese universities attractive to not only Chinese students but foreign students too, increased student-teacher ratio, provided education at par with international education, enabling Chinese universities to be ranked in the top 100, following which Indian students are also moving towards China for higher education. Due to this China created a perception that there was no need to go abroad for education when the students could get the same quality at home (Thakur, 2012).

As China did, India too needs to make many changes to its current higher education system and enhance quality of education. It's time that India too, pieces together a world class infrastructure, remodelling the programs and curriculum to better suit the youth of India today, mutually recognising degrees from different universities, giving importance to merit over reservation, launching more schools and universities and providing excellent opportunities for researchers. This would aid in the overall development of India, with Indian universities too making a place in the top 100 in the future. What lacks also is the Government of India's initiative to provide scholarships to Indian students to study abroad.

There are national scholarships available to those who have some form of disability and for other students from Jammu & Kashmir, etc. India has bilateral scholarship agreements with the UK, New Zealand, China, Republic of Korea, Sri Lanka, Singapore, Japan, Italy, Israel and Mexico. However, these countries fund the Indian students to study in them. The Indian government does not provide scholarships to Indian students going to study abroad. Moreover, the Ministry of Human Resource Development issues a No-Obligation to Return certificate that some countries ask for (Government of India, Ministry of Human Resource Development, 2017).

In this regard, India needs to implement policies such as those adopted by the High Education Commission of Pakistan, that provide a fully funded scholarship to Pakistani students on the condition of them signing a bond of surety, bound by law, that they would return to Pakistan post completion of studies, take up a job (helped to look for by the government of Pakistan) and serve the country for a minimum of 5 years. This ensures that the students receiving the government's

scholarship return to their country where, the government aids them in also getting a job (Higher Education Commission of Pakistan, 2017). Indian government too, needs such schemes so as to ensure that there is brain gain in the form of highly skilled labour returning to India, after receiving special skills training abroad.

Currently, the various programs such as Make in India, Startup India, etc. launched by the Indian government seems to have peaked the interest of non-resident Indians. Indians having non-resident status have started to leave their plush jobs in different countries and return to India. Many Indians return simply due to reasons of family (old/ailing parents, to be closer to other family members and friends), and for their children to be close to their roots. The many initiatives of the Indian government and the technological advancement are attracting Indians back to India who are leaving high paying jobs to return to India. This is their way of giving back to their country, their community, all the while being closer to family (See: Bhargava, 2016; Singh, 2015; Mathias, 2017; Das, 2017).

Although India's balance of payments shook a little due to fall in amount of remittances sent to India, India still has the highest share of world remittances and the largest diaspora population in the world. However, to brace the impact of lesser remittances, India needs to undertake more programs or schemes that would recognize foreign earned degrees easily and provide easy job opportunities to the highly qualified returning Indian population so that India can effectively utilise its highly skilled labour and convert a temporary brain drain into permanent brain gain (Jacob, 2017; Connor, 2017).

Chapter 4 – Conclusion

Overall, findings from the surveys and analysis made from the literature review suggests that the EU is indeed an attractive destination for foreign students, especially Indian students. The study also has found that though Indian students prefer to go to an EU member state for higher education, there is a changing trend of preference for a destination. The UNESCO Institute of Statistics (UIS) continues to show the UK as the top student destination in the EU, however, their data also shows a falling trend in the number of Indian students studying in the UK (number of students declined by 18% between 2015-2016)². We saw from our survey that Indian students are choosing to study in Germany over the UK (number of students increased by 75% between 2015-2016³). The sample size of this dissertation is not comparable to the population included by the UNESCO Institute of Statistics. It was difficult to recreate the same results as achieved by the UIS as the institute had a far larger reach covering more than 200 countries and we lacked the resources to carry out the same. Although the population of UIS consisted of only tertiary level students, we could only reach 0.4% of UIS' population limited to the EU plus Schengen area. However, regarding the change in the preferred destination between the UK and Germany, as seen from the findings and discussion above, we can conclude that the main reason for this change is the fact that political factors have come into play, overlapping the economic factors, which has had quite an impact on student choices and a negative effect on enrolments in UK universities.

Nevertheless, these factors do not seem to have a negative effect on the outflow of the students from India. As seen from the UIS Statistics, outflow of Indian students has only increased and India continues to be the second-highest country with net mobile students. As discussed, this is because there is a negative perception of quality of education in India which is fuelled by inadequate higher education facilities and the caste based/minority reservation system⁴. If the Indian education system continues to lag behind and ignores the needs of the youth, more number of students would want to pursue higher education abroad.

The results of our survey along with the supporting literature indicate that the reason behind an Indian student deciding to stay back in the host country mainly depends on the availability of jobs in the host countries. In the current scenario, due to factors such as strict immigration policies, changes in visa policies, unfriendly environment, hate crimes, racism, lack of

² See tables 3.2. and 3.5. in the annex

³ See tables 3.2. and 3.5. in the annex

⁴ Caste based/Minority reservation system explained, <https://www.economist.com/banyan/2013/06/29/indian-reservations>

integration in host countries, lack of job opportunities, stringent work policies, etc. combined with social factors like plain homesickness, are having a negative impact on the ability of the EU member states to retain this readily available pool of highly qualified workers. India on the other hand, may suffer a drop in remittances received from expatriates. However, it is gaining back its highly skilled labour, also due to the fact that India is increasingly seeing development in different sectors. This is the result of the various schemes introduced by the Indian government, that is seemingly more attractive, with more research and job opportunities available for these students.

We can also safely assume that India-EU student mobility has started showing a reverse brain drain in India considering the responses of Group 2 of this study and also the literature surveyed; it also leads to the development of the skilled labour of India. India-EU student mobility should be encouraged as it would lead to overall growth in India. Although trends in Indian student migration have changed in the recent years, the changing trends seem to be working positively for the sending country i.e. India. It is gaining a more skilled and learned population that would provide for a very capable labour force to the growing Indian industries, working force, or government organisations, and would probably lead to the overall growth of India in the future.

Suggestion for Future Use:

This study is quite useful for think tanks, or policy makers and can provide an insight on the recent perceptions and mind-set of Indian students moving to the EU, and how both India and the EU can gain from this. The study would be useful for the Indian government in terms of changing track and adopting policies that would help to provide better quality of education that in turn would cut down on student emigration and how they could better use the skills and opportunities presented by the returning highly qualified workers.

On the other hand, governments of EU member states, the EU institutions, various organizations and think tanks working in development and cooperation or education stand to gain from this study as they can use the same to implement policies that are able to retain Indian students who are graduating from their universities and by introducing flexible schemes or portals through which these students can find future job opportunities that may work for the benefit and overall growth of EU member states. This study is also important for the Academia, especially researchers working in the field of economic migration, education (especially higher education), student migration, who may want to take this research further. Personally, this study could be used for doctoral study or research, taking into account student migration leading to brain drain

or gain for more countries who are important sources of migration, other than India and could be formed as a comparative study between major source countries and major host countries or taking a particular region into account.

This study could also be developed as an inter-EU member states' study to measure the effects of the Schengen treaty on mobility and migration within the EU area, also considering student programs such as the Erasmus+, other bilateral exchange cooperation agreements; or for studying the inter-EU or inter-Schengen area student migration, leading to brain drain or gain in the home countries. This could be an interesting perspective to see how the movement of students within the EU area or the Schengen area, could be a drain for the home country but a gain for the host country, indirectly affecting the EU both positively and negatively at the same time.

Retention of these highly qualified Indian workers even for a temporary period, considering that these Indian students plan to move back to India eventually, would create a cyclical migration and a brain gain for both the EU and India. In this case, it is a win-win scenario. However, if the EU member states let these brains to go back to India immediately after completion of their education (while facing labour shortage and a steadily declining national population), the question is, Who stands to gain?

I. References:

Affirmative Action Indian reservations. (2013). Retrieved from <https://www.economist.com/banyan/2013/06/29/indian-reservations>

Altbach, P. (2014). Why do Indians want to study abroad?. The Hindu. Retrieved 4 March 2015, from <http://www.thehindu.com/opinion/op-ed/why-do-indians-want-to-study-abroad/article6376892.ece>

Appleyard, R. (1989). Migration and Development: Myths and Reality. *International Migration Review*, 23(3), 486. <http://dx.doi.org/10.2307/2546425>

Buga, N., & Meyer, J. (2012). Indian Human Resources Mobility: Brain drain versus Brain gain. *Cadmus.eui.eu*. Retrieved 2 March 2015, from <http://cadmus.eui.eu/bitstream/handle/1814/23482/CARIM-India-RR-2012-04.pdf?sequence=1>

Bhagwati, J. & Hamada, K. (1973). The Brain Drain, International Integration of Markets for Professionals and Unemployment: A Theoretical Analysis. Department of Economics Massachusetts Institute of Technology Working Paper, (102). Retrieved from <https://dspace.mit.edu/bitstream/handle/1721.1/63318/braindrainintern00bhag.pdf?sequence=1>

Bhargava, A. (2016). Indians give up cushy jobs abroad to come back to their homeland. *Rediff Business*. Retrieved from <http://www.rediff.com/business/report/special-indians-give-up-cushy-jobs-abroad-to-come-back-to-their-homeland/20160415.htm>

Boeri, T. (2008). Brain Gain: A European Approach. Retrieved from <https://www.cesifo-group.de/DocDL/forum3-08-panel2-1.pdf>, pp 30, 34

Candan, M., & Hunger, U. (2013). Migration Citizenship Education - Labour and Diversity. *Migrationeducation.org*. Retrieved 2 March 2016, from <http://www.migrationeducation.org/57.1.html?&rid=231&cHash=1b48582fa51c7dd0a20b9715f95acc8b>

Center for Research and Policy Making, Skopje Macedonia,. (2012). Transforming Brain Gain from A Concept to Real Gain. Retrieved 4 March 2015, from <http://www.crpm.org.mk/wp-content/uploads/2012/07/TRANSFORMING-BRAIN-GAIN- FROM.pdf>

Chowdhury, S. (2017). If the US won't let Indian students stay back to work, who stands to gain?. *Scroll.in*. Retrieved 6 September 2017, from <https://scroll.in/article/828467/rumours- of-visa-rule-changesmany-indian-students-are-giving-up-on-their-american-dream>

Clark, N. (2013). Indian Study Abroad Trends: Past, Present and Future. *World Education News and Review*. Retrieved 18 September 2016, from <http://wenr.wes.org/2013/12/indian-study-abroad-trends-past-present-and-future>

Custer, S. (2017). India moots higher education regulation overhaul. *News and business analysis for Professionals in International Education*. [online] Available at: <https://thepienews.com/news/india-higher-education-regulation-overhaul-heera/> [Accessed 27

Sep. 2017].

Das, M. (2017). Moving back home: Why some Indians choose to return to India leaving behind their comfortable lives abroad. Thenewsminute.com. Retrieved 18 September 2017, from <http://www.thenewsminute.com/article/moving-back-home-why-some-indians-choose-return-india-leaving-behind-their-comfortable-lives>

Deed of undertaking. (2017). Higher Education Commission, Pakistan. Retrieved 9 September 2017, from <http://hec.gov.pk/english/scholarshipsgrants/OSSP/Documents/Deed%20of%20Undertaking.pdf>

Docquier, F. (2014). I Z A World of Labour. Retrieved from <https://wol.iza.org/uploads/articles/31/pdfs/brain-drain-from-developing-countries.pdf>

Gilbert, N. (2001). social research UPDATE (p. 1). Guildford: Department of Sociology, University of Surrey. Retrieved from <http://sru.soc.surrey.ac.uk/SRU33.PDF>, pp 5

Global Flow of Tertiary-Level Students. (2016). UNESCO Institute for Statistics. Retrieved 27 December 2017, from <http://uis.unesco.org/en/uis-student-flow#slideoutmenu>

Goswami, K. (2017). India, USA and Indian Americans. [Blog] India in Details. Available at: <http://www.indiaindetails.com/index.php/2017/07/10/india-usa-and-indian-americans/> [Accessed 15 Sep. 2017].

Government of India Ministry of Commerce and Industry,. (2005). The India-EU Strategic Partnership Joint Action Plan. Retrieved 3 March 2015, from <http://commerce.nic.in/india-EU-jap.pdf>

Groizard, J. & Llull, J. (2006). Skilled migration and growth. Testing brain drain and brain gain theories. Departament D'economía Aplicada DEA Working Papers, (20). Retrieved from <http://ideas.repec.org/p/ubi/deawps/20.html#author>

Groizard, J., & Llull, J. (2007). Skilled migration and sending economies. Testing brain drain and brain gain theories. Economics and Economic History. Foundations of Economic Analysis. Retrieved 11 January 2018, from <http://pareto.uab.cat/jllull/Papers/BrainDrain.pdf>

Grubel, H. & Scott, A. (1966). The International Flow of Human Capital. The American Economic Review, 268-274. Retrieved from <http://summit.sfu.ca/item/16282>

Guerrini, F. (2017). Portugal Is Working On a Startup Visa For Indian Entrepreneurs. Forbes. Retrieved from <https://www.forbes.com/sites/federicoguerrini/2017/01/17/portugal-is-working-on-a-startup-visa-for-indian-entrepreneurs/#75d654aa3ed9>

Han, X., Stocking, G., Gebbie, M., & Appelbaum, R. (2015). Will They Stay or Will They Go? International Graduate Students and Their Decisions to Stay or Leave the U.S. upon Graduation. PLOS ONE, 10(3), e0118183. <http://dx.doi.org/10.1371/journal.pone.0118183>

Jacob, J. (2017). India remains top remittance recipient with \$6.2 billion earnings, but China closing in. Hindustan Times. Retrieved from <http://www.hindustantimes.com/india-news/with->

6-2-bn-wiped-off-remittances-to-india-experts-urge-govt-to-better-gulf-ties/story-3HYOtJaEqkECeDnOtf8UfL.html

Junor, S., & Usher, A. (2008). Student Mobility and Credit Transfer: A National and Global Survey. Education Policy. Retrieved 5 March 2015, from <http://www.educationalpolicy.org/publications/pubpdf/credit.pdf>

Kohli, G. (2016). What Brexit means to Indian students. Hindustan Times. [online] Available at: <http://www.hindustantimes.com/education/what-brexit-means-to-indian-students/story-C0YoRfKXfDFH5KVgn4DhYM.html> [Accessed 10 Sep. 2017].

Kurekova, L. (2011). Theories of migration: Conceptual review and empirical testing in the context of the EU East- West flows. Cream.conference-services.net. Retrieved 3 March 2015, from https://cream.conference-services.net/resources/952/2371/pdf/MECSC2011_0139_paper.pdf

Lavakare P.J. (2013) India Today: From Brain Drain to Brain Gain. In: Alon I., Jones V., McIntyre J.R. (eds) Innovation in Business Education in Emerging Markets. Palgrave Macmillan, London

Lavrakas, P. (2008). Encyclopedia of survey research methods. 1st ed. Thousand Oaks, Calif.: SAGE Publications, pp.577-578

Lee, K. (2012). Forbes Welcome. Forbes.com. Retrieved 18 September 2017, from <https://www.forbes.com/forbes/2012/0507/current-events-population-global-declining-birth-rates-lee-kuan-yew.html>

MacGregor, K. (2014). The shifting sands of international student mobility - University World News. Universityworldnews.com. Retrieved 2 March 2015, from <http://www.universityworldnews.com/article.php?story=20140912112348627>

Mathias, T. (2017). Why These NRIs Chose to Return to India After Years Abroad. The Better Indian. Retrieved from <https://www.thebetterindia.com/84146/non-resident-indian- return-home/>

Mervis, J. (2014). Data check: Why do Chinese and Indian students come to U.S. universities?. Science. Retrieved from <http://www.sciencemag.org/news/2014/11/data-check- why-do-chinese-and-indian-students-come-us-universities>

Mukherjee, S., & Chanda, R. (2012). Indian student mobility to selected European countries- an Overview. Indian Institute of Management Bangalore. Retrieved 2 March 2015, from <http://www.kuleuven.be/shop/internationaal/PDFDOCS/experten-group-india/report-made- by-iim-bangalore-student-mobility.pdf>

Mukherjee, S., & Chanda, R. (2012). Student Mobility from India to Selected European Countries - The Case of Germany and France. SSRN Electronic Journal. <http://dx.doi.org/10.2139/ssrn.2179724>

Naujoks, D. (2009). Emigration, Immigration, and Diaspora Relations in India. migrationpolicy.org. Retrieved 2 March 2015, from <http://migrationpolicy.org/article/emigration-immigration-and-diaspora-relations-india#5>

Organisation for Economic Co-operation and Development,. (2001). Trends in International Migration. Retrieved 3 March 2015, from <http://www.oecd.org/migration/mig/2507712.pdf>

Pew Research Center's Global Attitudes Project. (2016). International Migrants by Country. [online] Available at: <http://www.pewglobal.org/interactives/migration-tables/> [Accessed 22 Sep. 2017].

Potnuru, B. and Sam, V. (2015). India-EU engagement and international migration: Historical perspectives, future challenges, and policy imperatives. *IIMB Management Review* (2015) 27. [online] Bangalore: Indian Institute of Management Bangalore, pp.35-43. Available at: http://ac.els-cdn.com/S0970389615000026/1-s2.0-S0970389615000026-main.pdf?_tid=a88d6e1a-9eeb-11e7-877c-00000aacb361&acdnat=1506012244_a8415246bd5321878237c613a74d04ec [Accessed 22 Sep. 2017].

Riaño, Y. (2012). The Invisibility of Family in Studies of Skilled Migration and Brain Drain. *Diversities*. vol. 14, no. 1, pp. 25-44, UNESCO. ISSN 2079-6595

S., Raveesh. (2013). Brain Drain: Socio-Economic Impact on Indian Society. *International Journal of Humanities And Social Science Invention*, 2(5), 12 - 17. Retrieved from https://mygov.in/sites/default/files/user_comments/C251217.pdf

Sahay, A. (2009). *Indian diaspora in the United States Brain Drain or Gain*. Lanham, MD: Lexington Books.

Scholarships & Education Loan | Government of India, Ministry of Human Resource Development. (2017). *Mhrd.gov.in*. Retrieved 17 September 2017, from <http://mhrd.gov.in/scholarships-education-loan>

Schutt, R. (2008). *Sampling* (1st ed., pp. 148-189). Retrieved from http://www.sagepub.com/sites/default/files/upm-binaries/24480_Ch5.pdf

Senft, C. (2017). India and Germany: A Partnership to Be Reckoned With. [online] *Worldview.stratfor.com*. Available at: <https://worldview.stratfor.com/article/india-and-germany-partnership-be-reckoned> [Accessed 11 Sep. 2017].

Singh, N. (2015). Growing trend: NRIs return home to work as economy surges. *The Economic Times*. Retrieved from <http://economictimes.indiatimes.com/nri/returning-to-india/growing-trend-nris-return-home-to-work-as-economy-surges/articleshow/46709731.cms>

Smith, B. (2015). France introduces two-year PSW permit for Indian graduates. *News And Business Analysis For Professionals In International Education*. Retrieved from <https://thepienews.com/news/france-introduces-two-year-psw-permit-indian-graduates/>

Srivastava, V. (2016). Why scientists of Indian origin are leaving a better life and returning to India. *The Economic Times*. Retrieved from <https://economictimes.indiatimes.com/small-biz/startups/why-scientists-of-indian-origin-are-leaving-a-better-life-and-returning-to-india/articleshow/53688721.cms>

Stouffer, S. (1940). Intervening Opportunities: A Theory Relating Mobility and Distance. *American Sociological Review*, 5(6), 845-867. Retrieved from <http://www.jstor.org/stable/2084520>

Times Higher Education (THE). (2017). World University Rankings. [online] Available at: https://www.timeshighereducation.com/world-university-rankings/2018/world-ranking#!/page/0/length/-1/sort_by/rank/sort_order/asc/cols/scores [Accessed 23 Sep. 2017].

Thakur, R. (2012). The quality of India's higher education. The Hindu. [online] Available at: <http://www.thehindu.com/todays-paper/tp-opinion/the-quality-of-indias-higher-education/article3031530.ece> [Accessed 10 Sep. 2017].

The Hindu. (2014). India has world's largest youth population: UN report. Retrieved from <http://www.thehindu.com/todays-paper/tp-in-school/india-has-worlds-largest-youth-population-un-report/article6612615.ece>

The Times of India (2017). Most Indian students leave UK after degree. [online] Available at: <http://timesofindia.indiatimes.com/nri/other-news/most-indian-students-leave-uk-after-degree/articleshow/60213657.cms> [Accessed 23 Sep. 2017].

The Times of India (2017). US universities register drop in Indian student applications. [online] Available at: <http://timesofindia.indiatimes.com/nri/us-canada-news/us-universities-register-drop-in-indian-student-applications/articleshow/57851053.cms> [Accessed 20 Sep. 2017].

Thomas, D. (2014). Brain drain: Boon for developed countries, but bane for India. Studyabroad.careers360.com. Retrieved 2 March 2015, from <http://www.studyabroad.careers360.com/brain-drain-boon-developed-countries-bane-india>

Thorat, S. (2017). A blueprint for higher education. The Hindu. [online] Available at: <http://www.thehindu.com/opinion/lead/a-blueprint-for-higher-education/article7522994.ece> [Accessed 27 Sep. 2017].

Vaidyanathan, R. (2013). Indian students think twice about UK. [online] BBC News. Available at: <http://www.bbc.com/news/uk-politics-21461669> [Accessed 15 Sep. 2017].

van de Laar, M., & Hercog, M. (2014). Determinants of international mobility decision: The case-study of India - UNU Migration Network. Migration.unu.edu. Retrieved 27 February 2016, from <http://migration.unu.edu/publications/working-papers/determinants-of-international-mobility-decision-the-case-study-of-india.html>

Varma, R. & Kapur, D. (2013). Comparative Analysis of Brain Drain, Brain Circulation and Brain Retain: A Case Study of Indian Institutes of Technology. Journal of Comparative Policy Analysis: Research And Practice, 15(4), 315-330. <http://dx.doi.org/10.1080/13876988.2013.810376>

II. Annex

Questionnaire for Group 1

Recent Trends of Indian Student Migration to European Union: Brain Drain or Brain Gain?

Dear respondent,

I am conducting a survey to understand changing patterns of Indian student migration and whether it leads to brain drain or brain gain in India. I assure you that the responses provided by you shall be kept confidential and used only for academic purpose. I request you to read the questions and answer carefully.

Thank you for your time, Varsha Chawla

Masters in International Relations and European Studies, Universidade de Évora

Part A

1. What is your age?
 - 18 - 21 years
 - 22 - 25 years
 - 26 - 30 years
 - 31 and above

2. Gender
 - Male
 - Female

3. Field of Study (Current)
 - Engineering
 - Management
 - Health Sciences
 - Social Sciences
 - Communication
 - Other, _____

4. Family annual income
 - 0 – 5,00,000
 - 5,00,001 – 10,00,000
 - 10,00,001 – 15,00,000
 - 15,00,001 – 20,00,000
 - 20,00,001 – 25,00,000
 - 25,00,001 and above

5. Where are you from?

- Semi rural
- Rural
- Semi urban
- Urban
- Metro

Part B

1. Do you want to study abroad?

- Yes
- No
- Undecided

2. Do you currently have a plan to study abroad?

- Yes
- No

3. If Yes, which country are you planning to study in?

4. If No, in which country would you prefer to study? (Multiple choices are welcome)

- Czech Republic
- Finland
- France
- Germany
- Ireland
- Italy
- Netherlands
- Spain
- Sweden
- United Kingdom
- Other, _____

5. According to you, which of the following factors could be influential in deciding where and what to study? Maximum 3 choices.

- Availability of courses in English
- Availability of scholarships
- Course structure
- Country
- Cultural diversity
- Facilities for postgraduate research

- Future career prospects
 - Quality of education
 - University ranking
 - Other, _____
6. Would you return to India after completing your studies in the host country?
- Yes
 - No
 - Undecided
7. If yes, which of these are the factors that would influence your decision in returning to the India? Maximum 2 choices.
- Family
 - Job opportunities
 - Culture
 - Work environment
 - High earnings
 - I love India!
 - Other, _____
8. If No, which of these are the factors that would influence your decision to stay back in the host country? Maximum 2 choices.
- Career opportunities
 - Culture
 - High earnings
 - Standard of living
 - Work environment
 - Other, _____
9. After completing your studies, when are you likely to return to India?
- Immediately
 - 1-5 years
 - 6-10 years
 - 11-15 years
 - 16-20 years
 - 21 years or more
10. After completion of your studies, would you look for job opportunities in the host country?
- Yes
 - No

- Undecided

11. If you get a job after completing your studies, would you stay back in the host country?

- Yes
- No
- Undecided

12. If you get a job, when are you likely to return to India?

- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21 years or more

13. If you do not get a job after completing your studies, would you still stay back in the host country?

- Yes
- No
- Undecided

14. If you do not get a job, when are you likely to return to India?

- Immediately
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21 years or more

15. If you get a job in the host country, would you still prefer to return to India?

- Yes
- No
- Undecided

16. Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?

- Yes
- No
- Undecided

17. Based on your educational qualifications/area of specialization, where do you see better job opportunities?

- Europe
- India
- United States
- Other, _____

18. According to your opinion, from the following, what does India lack that could be the main reasons for emigration of Indian students? (Multiple choices are welcome) Maximum 3 choices.

- Facilities for postgraduate research
- Higher earnings
- Job opportunities in specialized areas
- Options for specialization
- Quality of education
- Scholarship opportunities
- Standard of living
- Other, _____

19. If all Indian educational degrees were internationally recognized, would you still want to study abroad?

- Yes
- No
- Undecided

20. If quality of education in India was at par with international universities, would you still want to study abroad?

- Yes
- No
- Undecided

21. From the following which factors according to you would be influential in choosing to permanently settle in the host country? (Multiple responses are welcome) Maximum 2 choices.

- Better educational opportunities
- Higher earnings
- Citizenship of host country
- Social benefits (medical services, retirement benefits, pension)
- Other, _____

22. Please give one dominant factor that would influence your decision if you were to permanently settle in the host country.
-

Questionnaire for Group 2

Recent Trends of Indian Student Migration to European Union: Brain Drain or Brain Gain?

Dear respondent,

I am conducting a survey to understand changing patterns of Indian student migration and whether it leads to brain drain or brain gain in India. I assure you that the responses provided by you shall be kept confidential and used only for academic purpose. I request you to read the questions and answer carefully.

Thank you for your time, Varsha Chawla

Masters in International Relations and European Studies, Universidade de Évora

Part A

1. What is your age?
 - 18 - 21 years
 - 22 - 25 years
 - 26 - 30 years
 - 31 and above

2. Gender
 - Male
 - Female

3. Field of Study (Current)
 - Engineering
 - Management
 - Health Sciences
 - Social Sciences
 - Communication
 - Other, _____

4. Family annual income
 - 0 – 5,00,000
 - 5,00,001 – 10,00,000
 - 10,00,001 – 15,00,000
 - 15,00,001 – 20,00,000

- 20,00,001 – 25,00,000
- 25,00,001 and above

5. Where are you from?

- Semi rural
- Rural
- Semi urban
- Urban
- Metro

Part B

1. Which country are you currently studying in?

2. Which of the following factors for you were influential in deciding where and what to study? Maximum 3 choices.

- Availability of courses in English
- Availability of scholarships
- Course structure
- Country
- Cultural diversity
- Facilities for postgraduate research
- Future career prospects
- Quality of education
- University ranking
- Other, _____

3. Would you return to India after completing your studies in the host country?

- Yes
- No
- Undecided

4. If yes, which of these are the factors that would influence your decision in returning to the India? Maximum 2 choices.

- Family
- Job opportunities
- Culture
- Work environment
- High earnings
- I love India!
- Other, _____

5. If No, which of these are the factors that would influence your decision to stay back in the host country? Maximum 2 choices.
- Career opportunities
 - Culture
 - High earnings
 - Standard of living
 - Work environment
 - Other, _____
6. After completing your studies, when are you likely to return to India?
- Immediately
 - 1-5 years
 - 6-10 years
 - 11-15 years
 - 16-20 years
 - 21 years or more
7. Do you currently have a job in the host country?
- Yes
 - No
8. If no, after completion of your studies, would you look for job opportunities in the host country?
- Yes
 - No
 - Undecided
9. If you get a job after completing your studies, would you stay back in the host country?
- Yes
 - No
 - Undecided
10. If you get a job or already have one, when are you likely to return to India?
- 1-5 years
 - 6-10 years
 - 11-15 years
 - 16-20 years
 - 21 years or more

11. If you do not get a job after completing your studies, would you still stay back in the host country?

- Yes
- No
- Undecided

12. If you do not get a job, when are you likely to return to India?

- Immediately
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21 years or more

13. If you get a job in the host country, would you still prefer to return to India?

- Yes
- No
- Undecided

14. Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?

- Yes
- No
- Undecided

15. Based on your educational qualifications/area of specialization, where do you see better job opportunities?

- Europe
- India
- United States
- Other, _____

16. According to your opinion, from the following, what does India lack that could be the main reasons for emigration of Indian students? (Multiple choices are welcome) Maximum 3 choices.

- Facilities for postgraduate research
- Higher earnings
- Job opportunities in specialized areas
- Options for specialization
- Quality of education
- Scholarship opportunities

- Standard of living
- Other, _____

17. If all Indian educational degrees were internationally recognized, would you still want to study abroad?

- Yes
- No
- Undecided

18. If quality of education in India was at par with international universities, would you still want to study abroad?

- Yes
- No
- Undecided

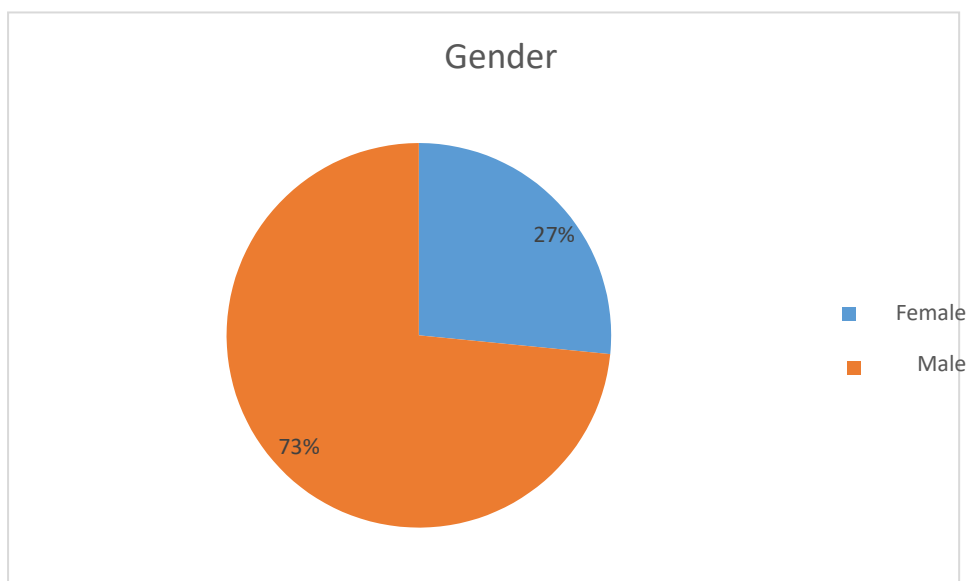
19. From the following which factors according to you would be influential in choosing to permanently settle in the host country? (Multiple responses are welcome) Maximum 2 choices.

- Better educational opportunities
- Higher earnings
- Citizenship of host country
- Social benefits (medical services, retirement benefits, pension)
- Other, _____

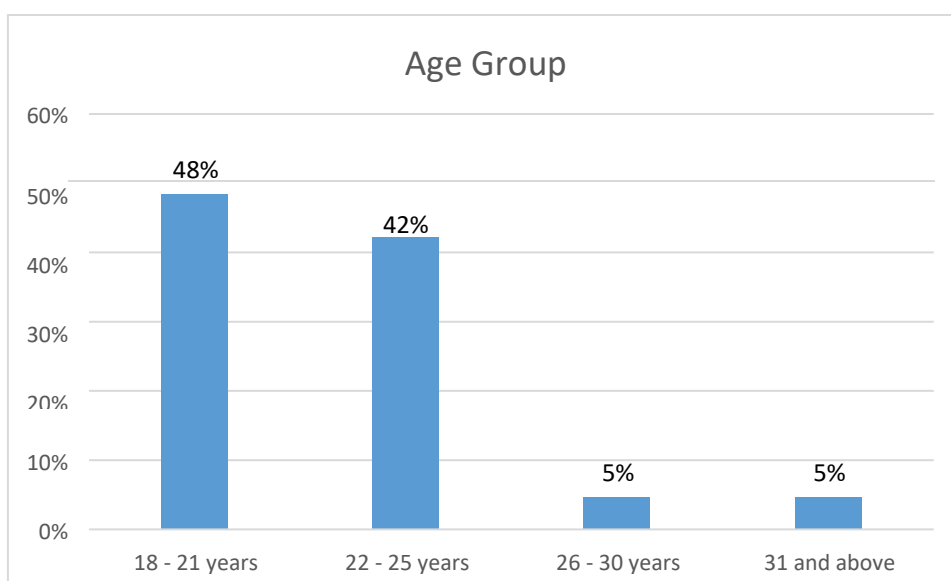
20. Please give one dominant factor that would influence your decision if you were to permanently settle in the host country.

Part 1 – Survey year 2015

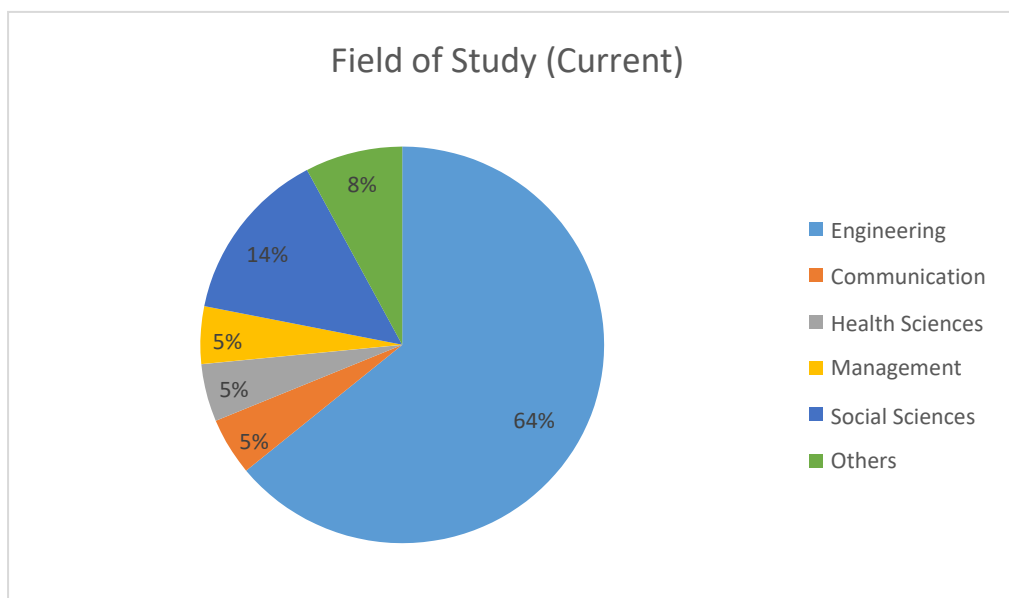
Figure B.1. Sample Profile – Group 1 – Students in India



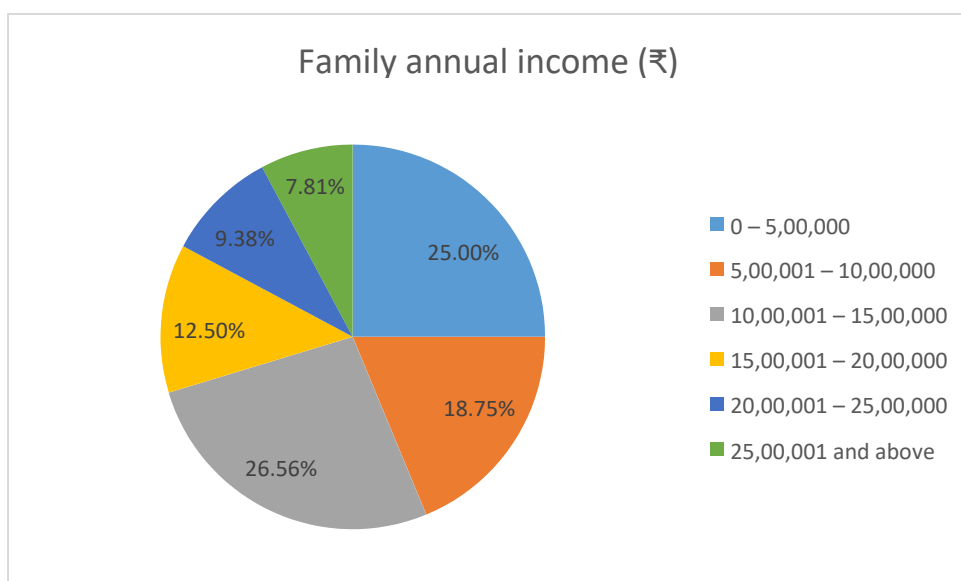
Distribution by gender



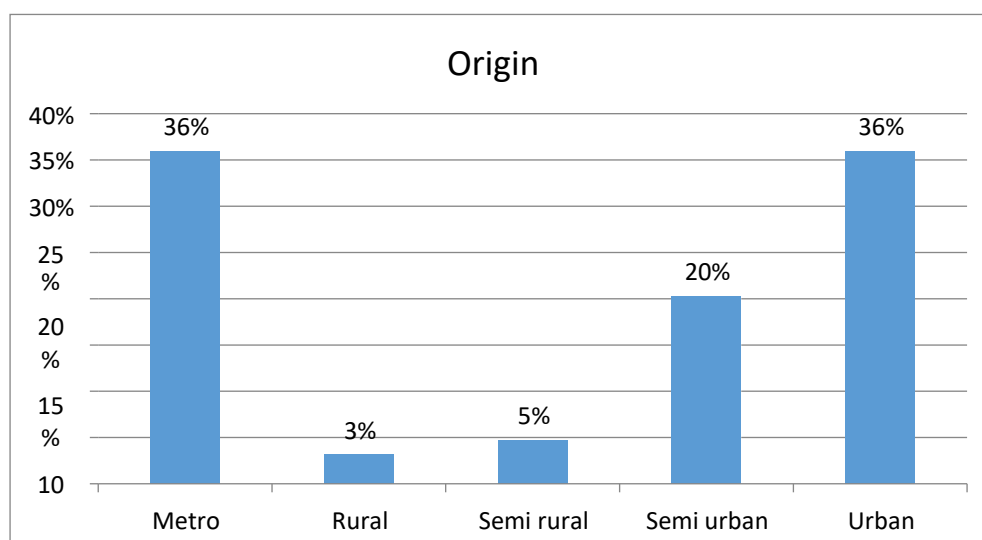
Distribution by age



Distribution by current field of study



Distribution by family annual earnings in rupees



Distribution by place of origin

Figure B.2. Do you want to study abroad?

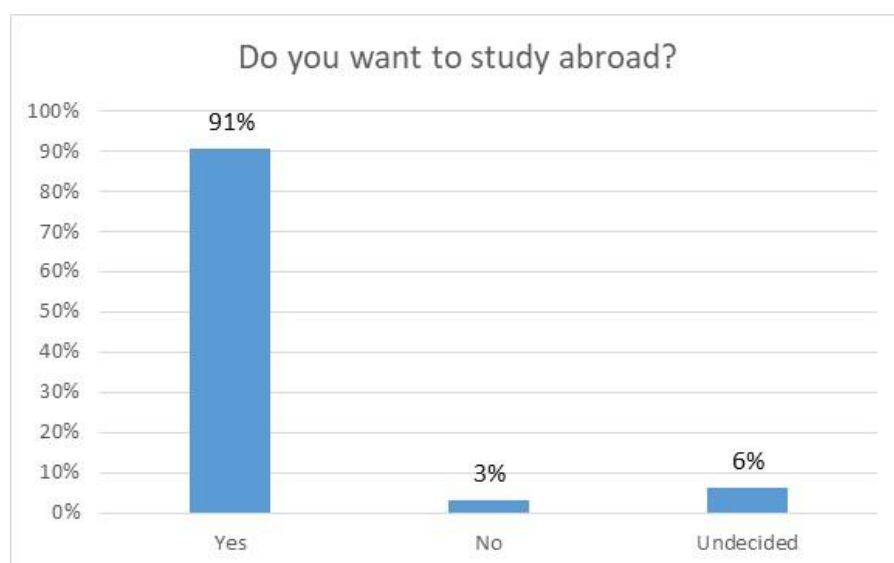


Figure B.3. Do you currently have a plan to study abroad?

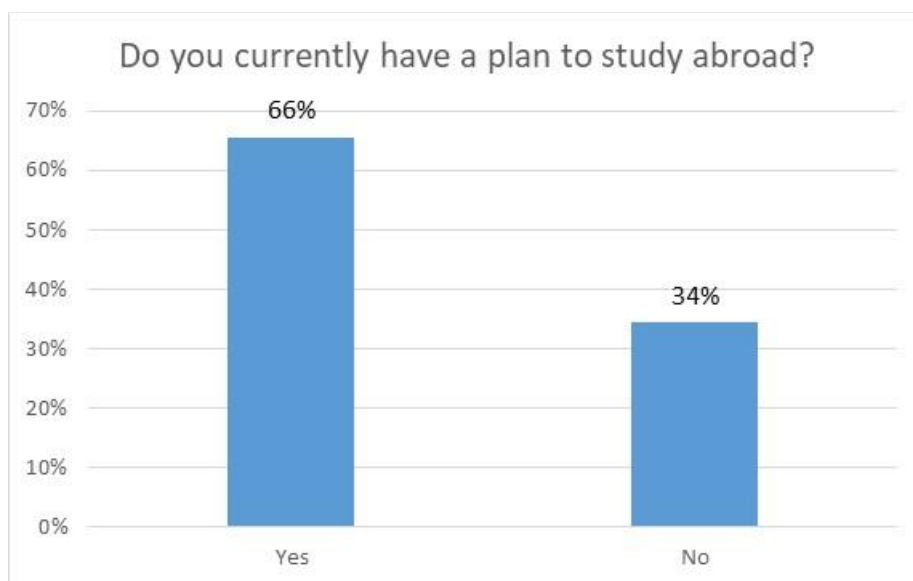


Figure B.4.: If yes, which country are you planning to study in?

If Yes, Which country are you planning to study

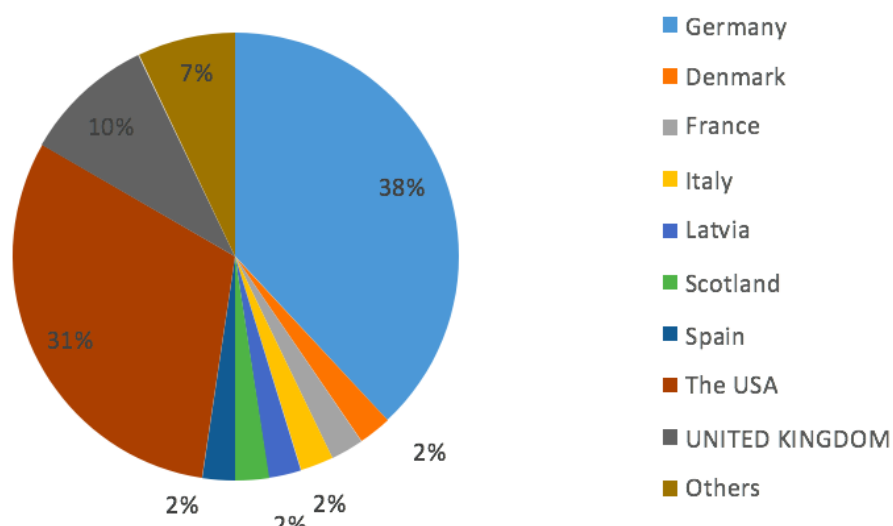


Figure B.5.: If no, in which country would you prefer to study?

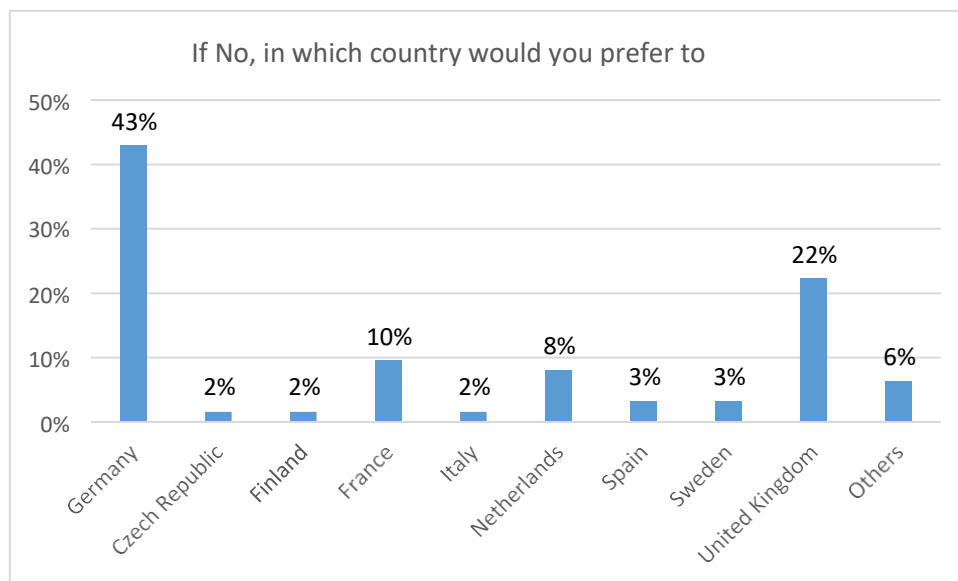
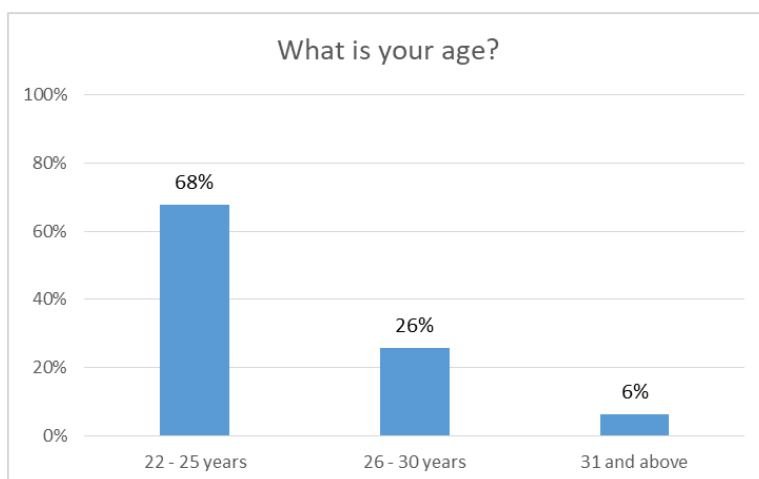
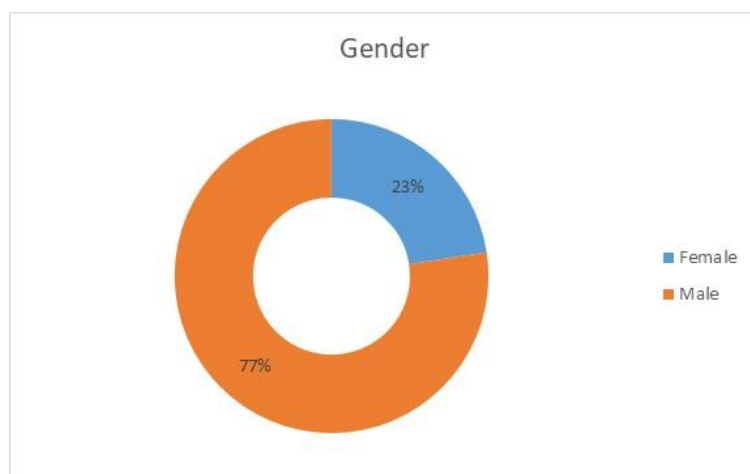
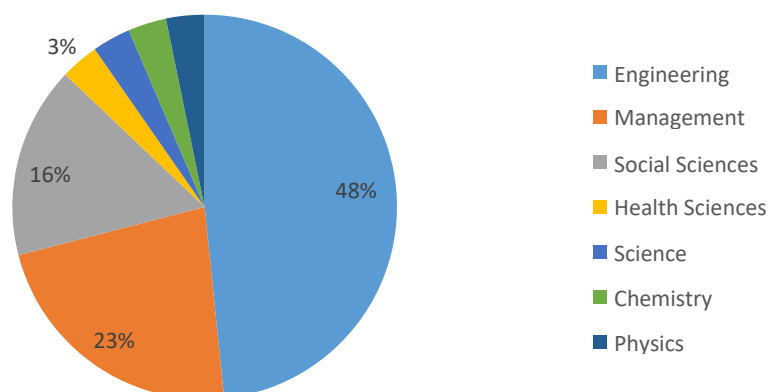


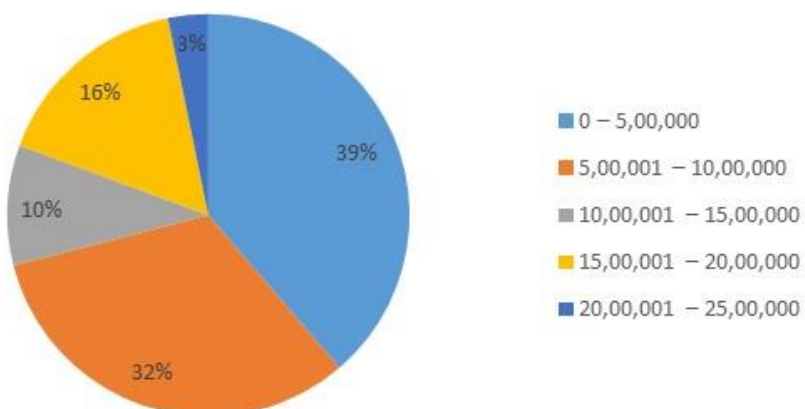
Figure B.6. Sample Profile – Group 2 – Indian students in Europe



Field of Study (Current)



Family annual income



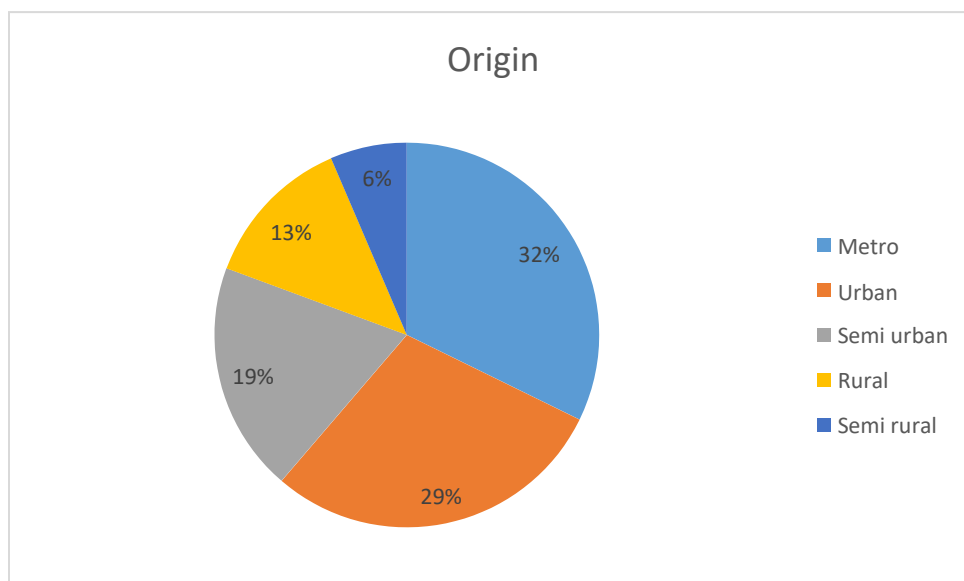
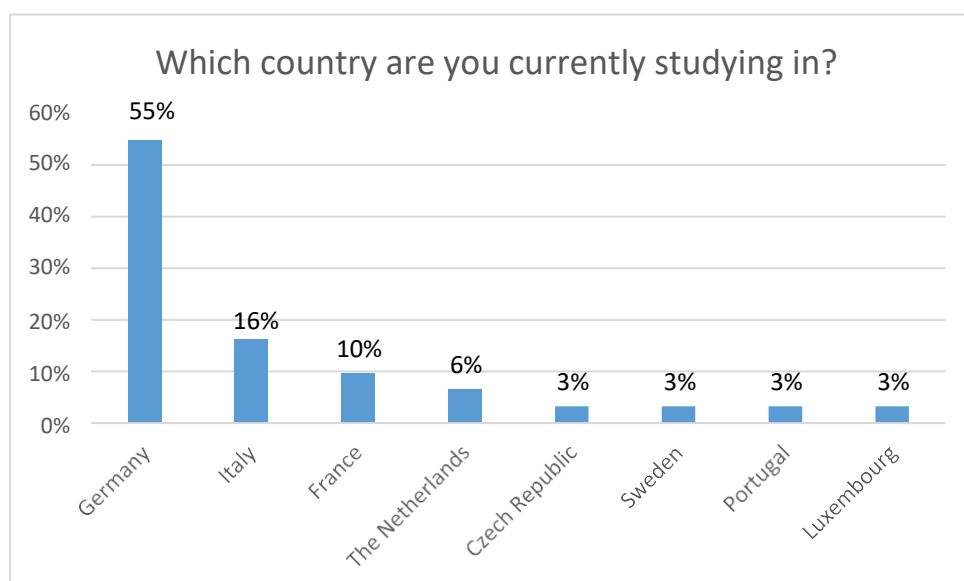
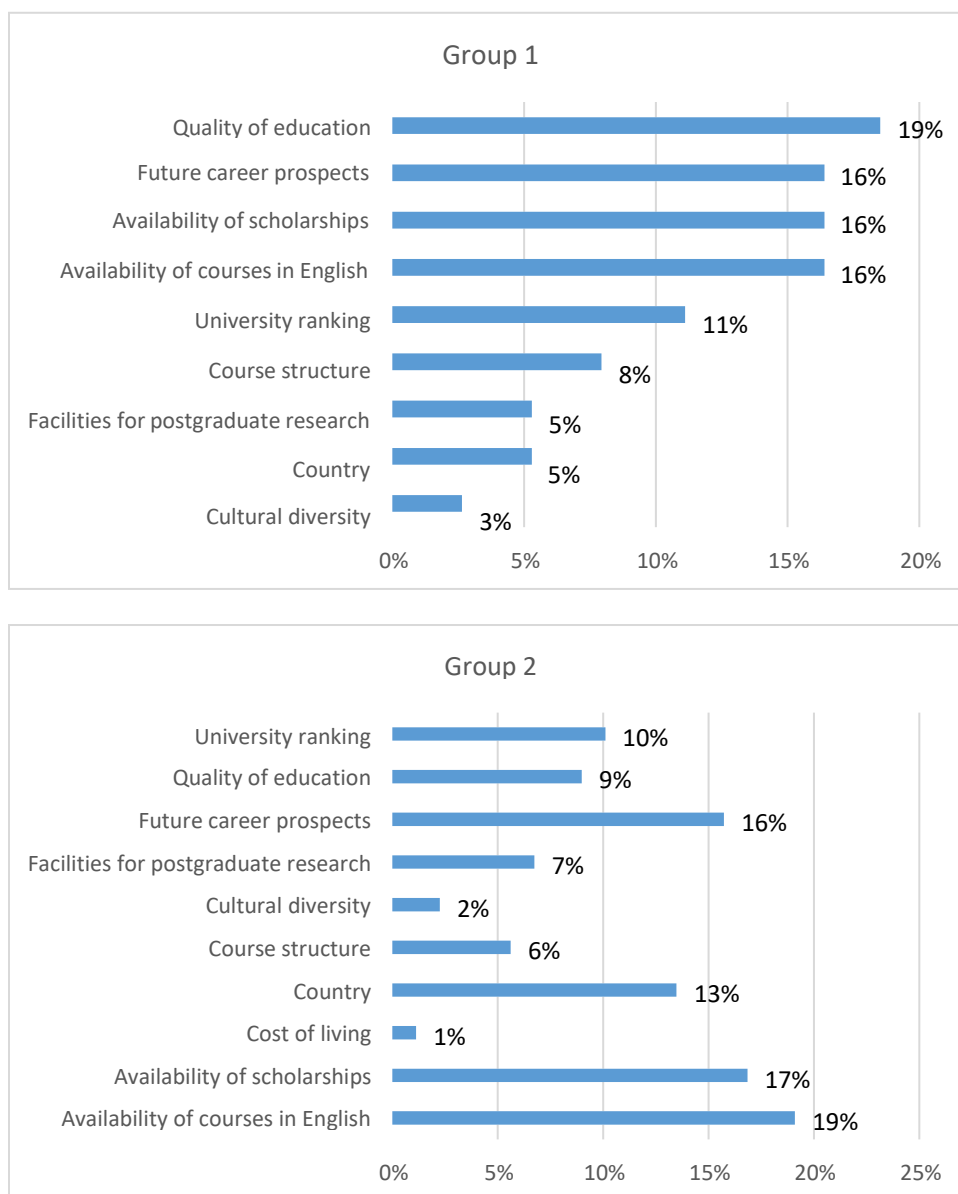


Figure B.7.: Which country are you currently studying in?



Comparative Analysis and Interpretation of Results

Figure B.8. According to you, which of the following factors could be influential in deciding where and what to study?



For group 1, the quality of education is the most important factor that influences their decision of where and what to study. 19 per cent of the respondents represent quality of education as the influential factor. This is followed by future career prospects, availability of scholarships and availability of courses in English that are represented equally by 16 per cent of the respondents.

For group 2, 19 per cent of the respondents answered that availability of courses in English is the factor that influences their decision on where and what to study the most. For 17 per cent of the respondents it was availability of scholarships and for 16 per cent, future career prospects.

Figure B.9. Would you return to India after completing your studies in the host country?

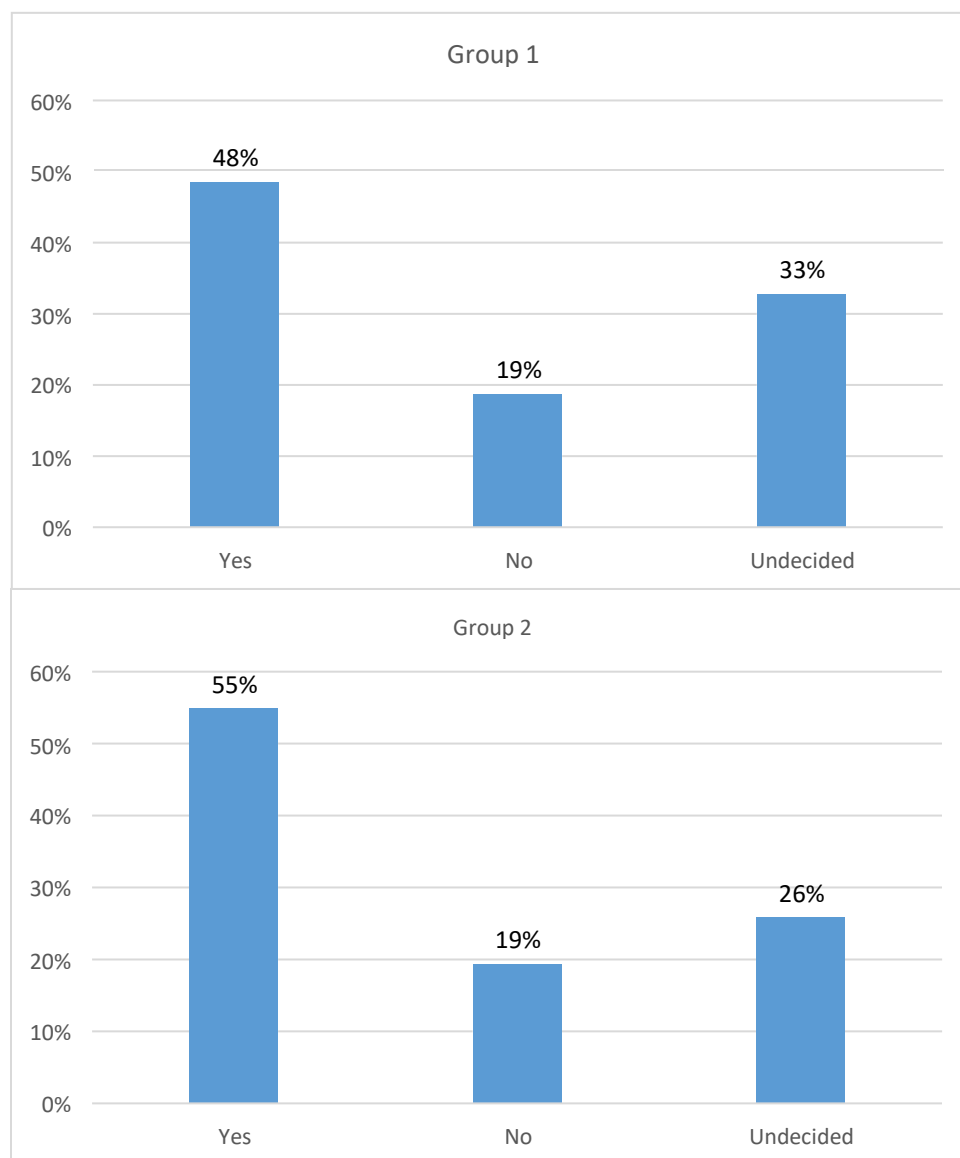
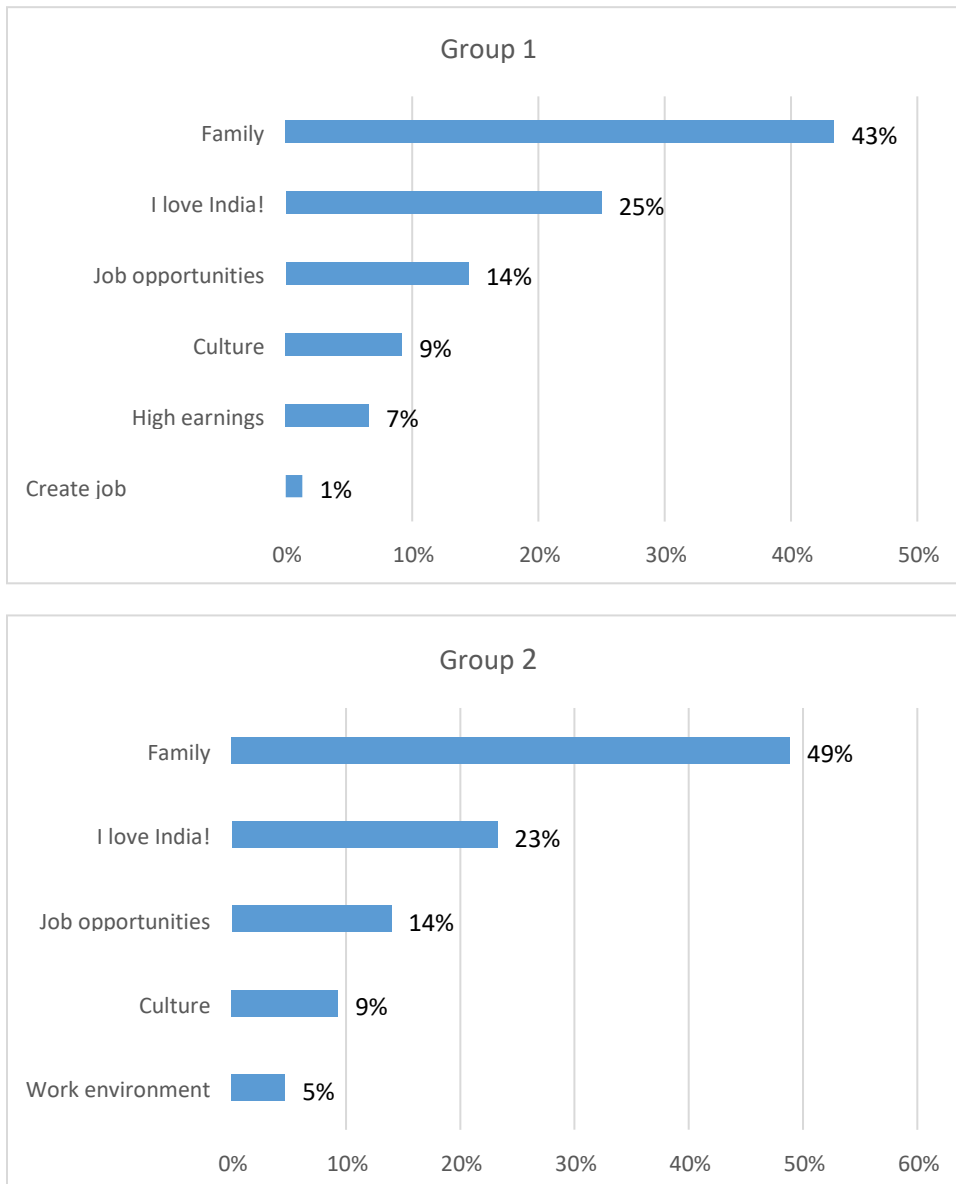
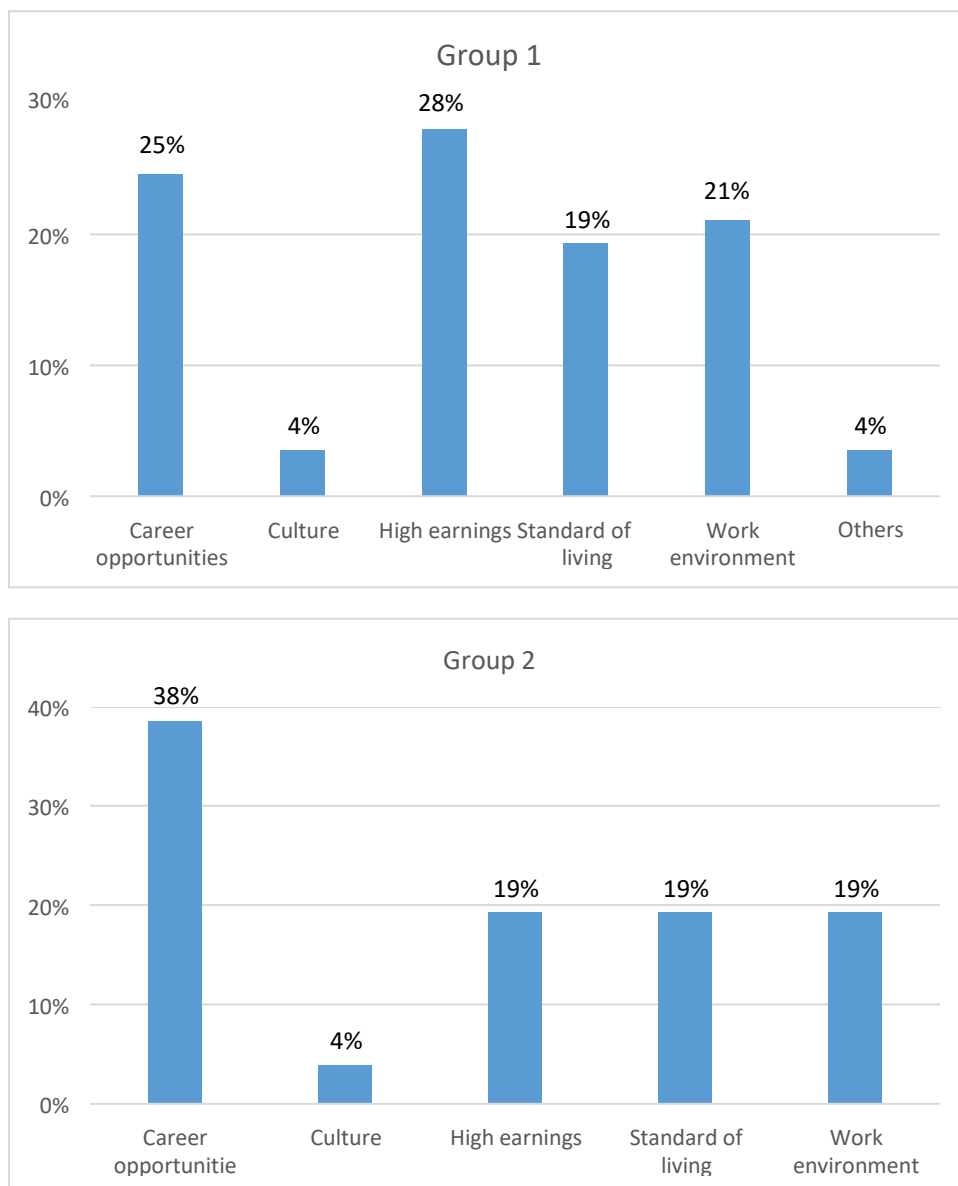


Figure B.10. If yes, which of these are the factors that would influence your decision in returning to the India?



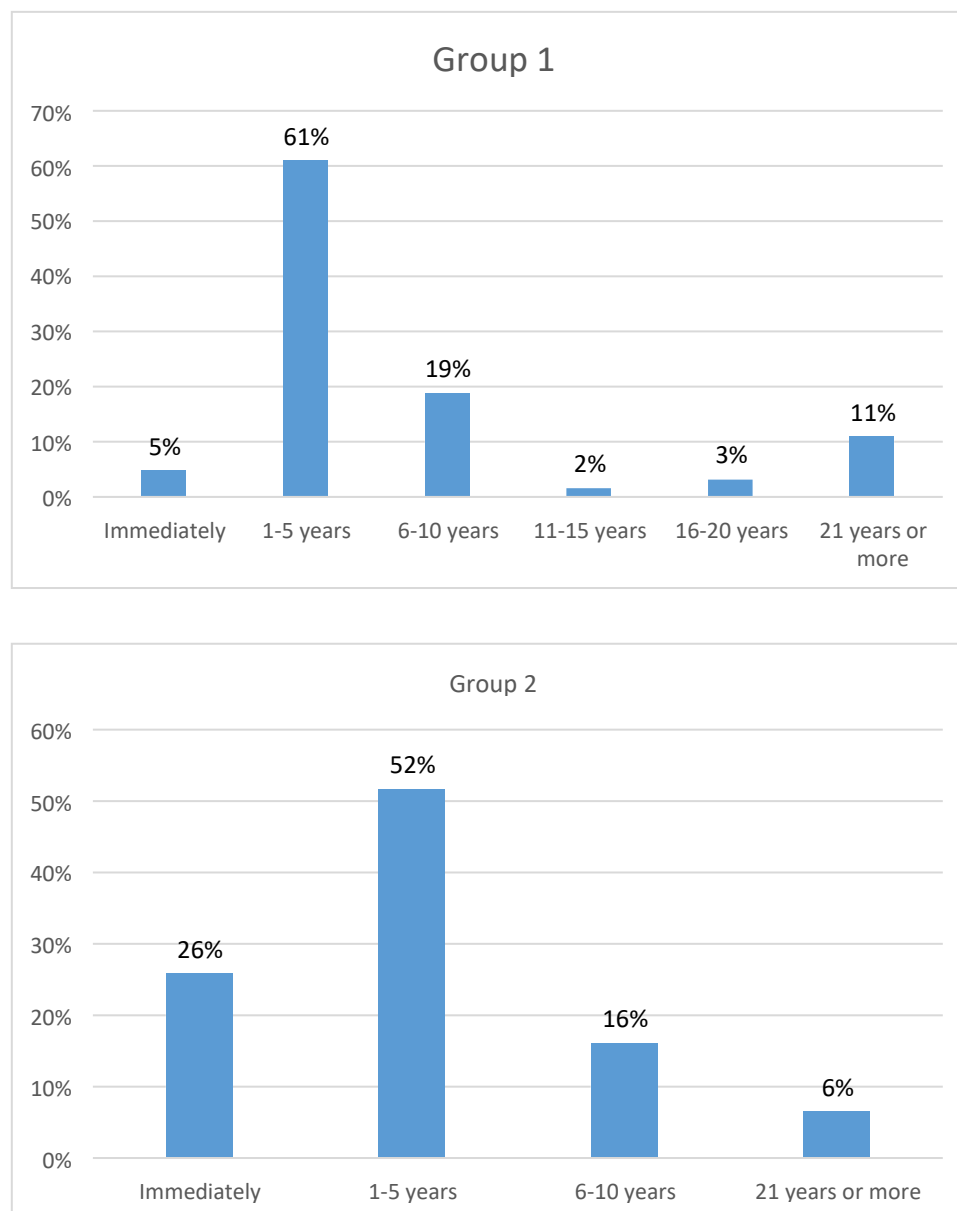
In both group 1 and group 2, the factors that would influence the respondents to return to India were similar. In group 1, 43 per cent of the respondents answered family as compared to 49 per cent of the respondents in group 2 that answered family as the most important factor for them to return to India. The respondents' love for India, the country itself, was highlighted as the second most important factor and was represented by 25 per cent respondents in group 1 and 23 per cent respondents in group 2. 14 per cent of the respondents in group 1 and group 2 responded job opportunities as an important factor.

Figure B.11. If No, which of these are the factors that would influence your decision to stay back in the host country?



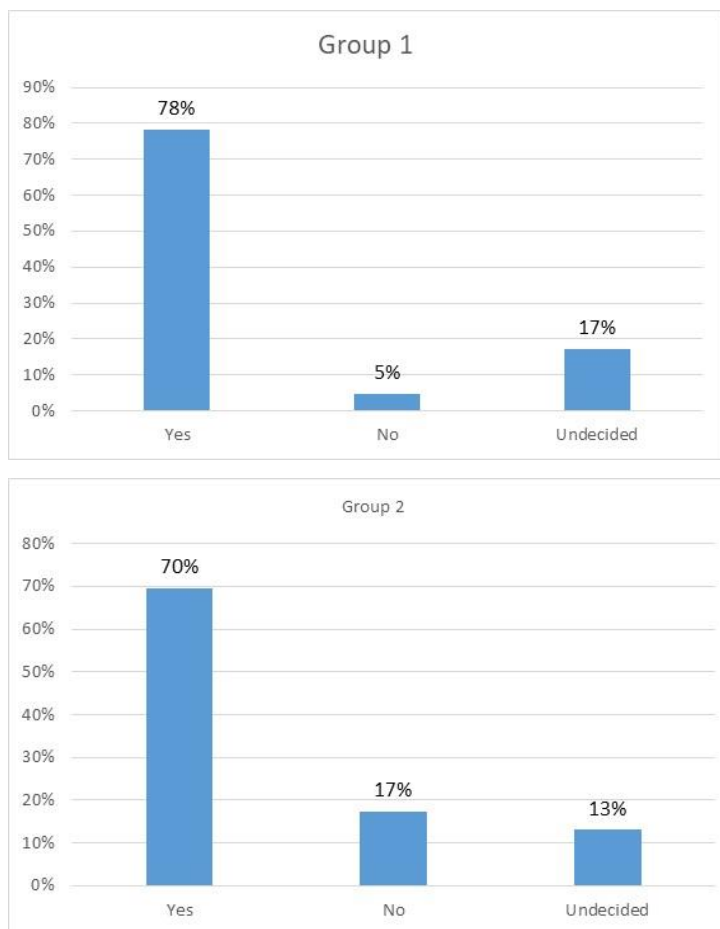
The factors that would influence the decision of the students to stay back in the host country was higher earnings in group 1 that was chosen by 28 per cent of the respondents as compared to 38 per cent of the respondents in group 2 that chose career opportunities in the host country as the important factor. 25 per cent of the respondents in group 1 also career opportunities and 21 per cent of the respondents chose work environment as other important factors. Career opportunities and work environment were two other factors represented highly in group 1. High earnings, standard of living and work environment were all represented equally in group 2, 19 per cent respectively.

Figure B.12. After completing your studies, when are you likely to return to India?



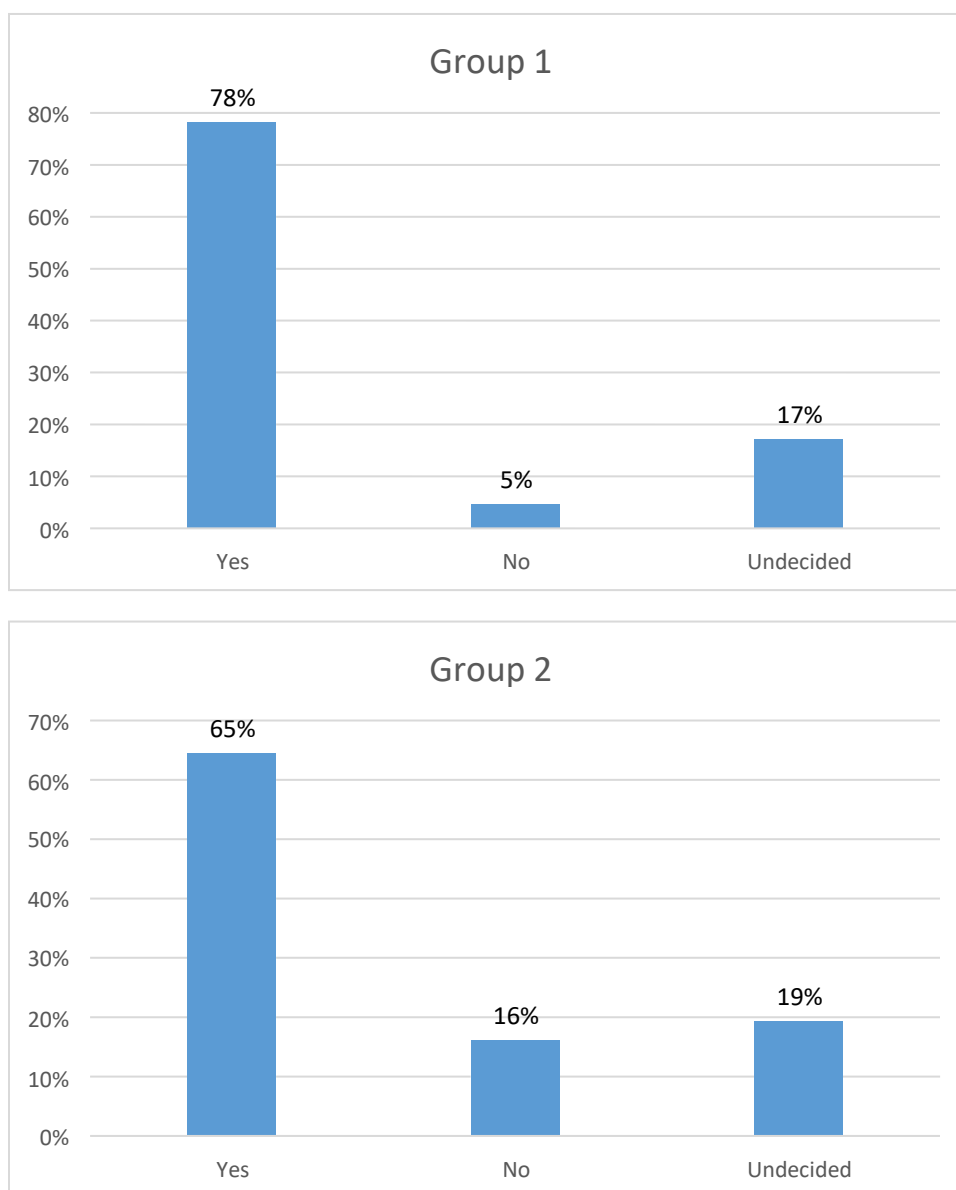
61 per cent of the respondents in group 1 and 52 per cent of the respondents in group 2 responded 1 to 5 years when asked when would they return to India. In group 1, 19 per cent responded 6 to 10 years, 11 per cent responded 21 years or more and 5 per cent responded immediately. Differences in opinions were noticed as 26 per cent of the respondents in group 2 responded that they would return to India immediately after completing their studies, 16 per cent responded 6 to 10 years and 6 per cent responded 21 years or more.

Figure B.13. After completion of your studies, would you look for job opportunities in the host country?



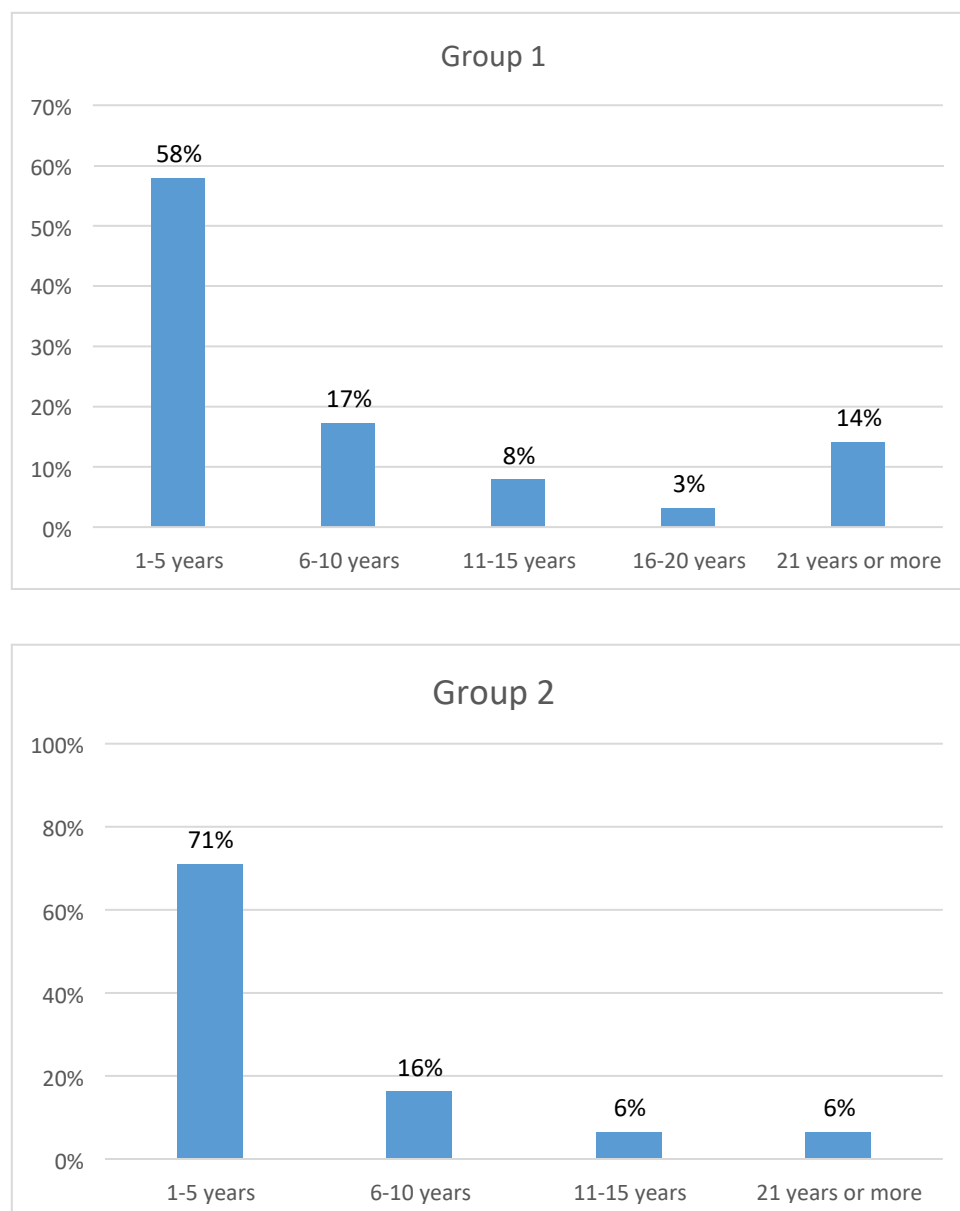
78 per cent respondents in group 1 and 70 per cent respondents in group 2 responded that they would look for job opportunities in the host country. 17 per cent of the respondents in group 1 and 13 per cent in group 2 were undecided. 5 per cent of the respondents in group 1 and 17 per cent of the respondents in group 2 said they would not look for job opportunities in the host country.

Figure B.14. If you get a job after completing your studies, would you stay back in the host country?



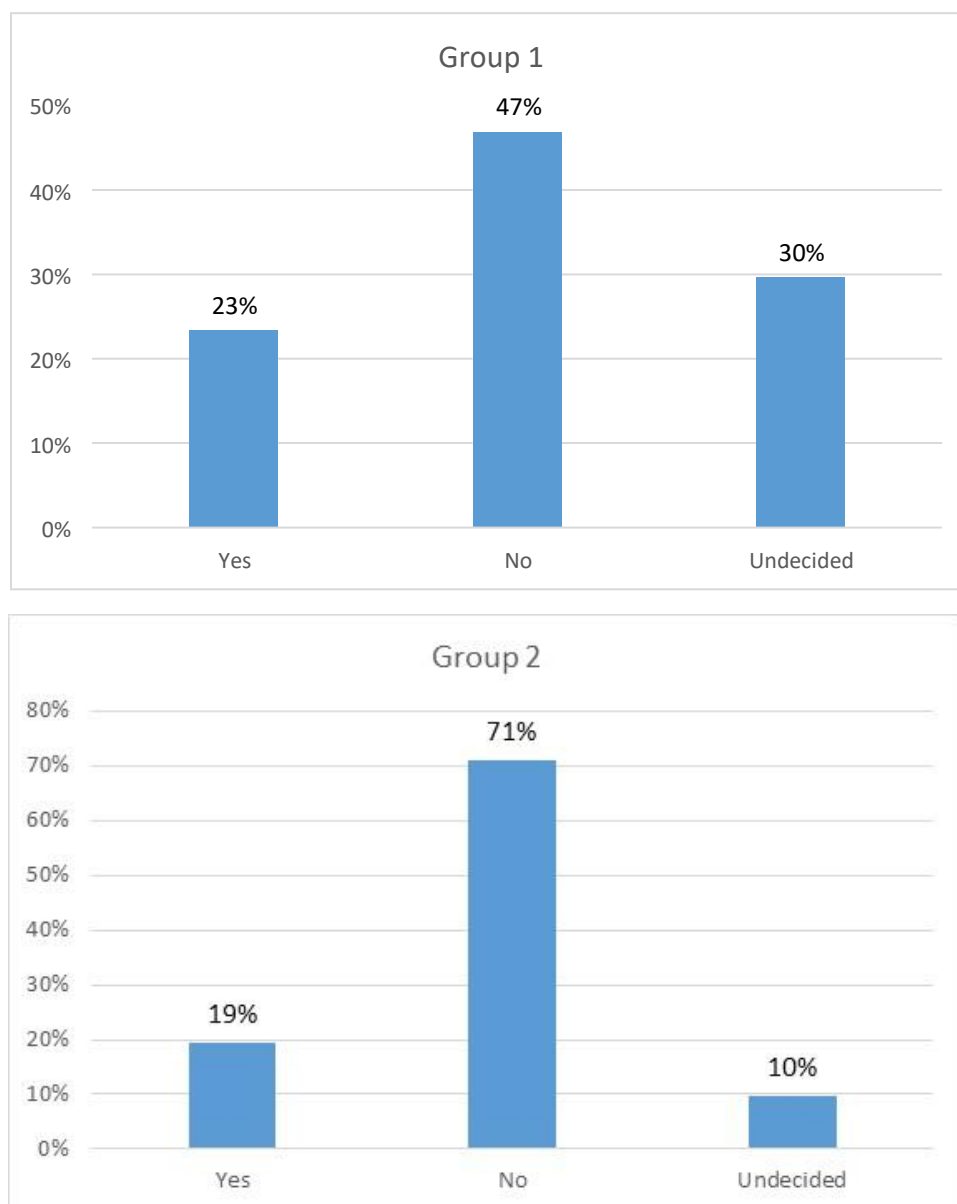
78 per cent of the respondents in group 1 and 65 per cent of the respondents in group 2 would stay back in the host country if they got a job in the host country. 17 per cent of the respondents in group 1 and 19 per cent in group 2 were undecided. 5 per cent of the respondents in group 1 and 16 per cent of the respondents in group 2 said they would not stay back in the host country even if they got a job in the host country.

Figure B.15. If you get a job, when are you likely to return to India?



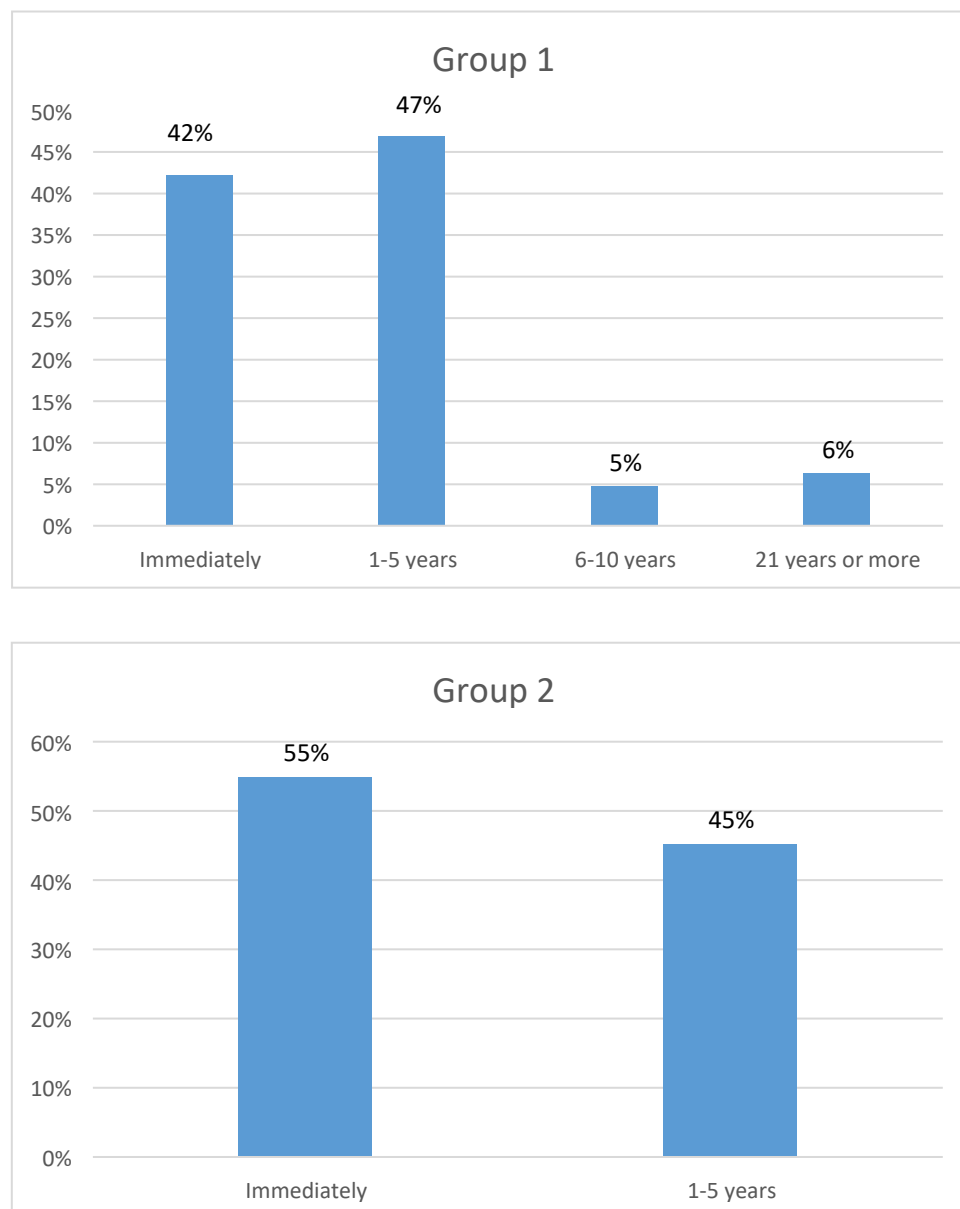
If the respondents were able to get a job in the host country, 58 per cent of the respondents in group 1 and 71 per cent of the respondents in group 2 would return to India between 1 to 5 years. 17 per cent of the respondents in group 1 and 16 per cent of the respondents in group 2 would return between 6 to 10 years and 14 per cent of the respondents in group 1 and 6 per cent in group 2 would return in 21 years or more.

Figure B.16. If you do not get a job after completing your studies, would you still stay back in the host country?



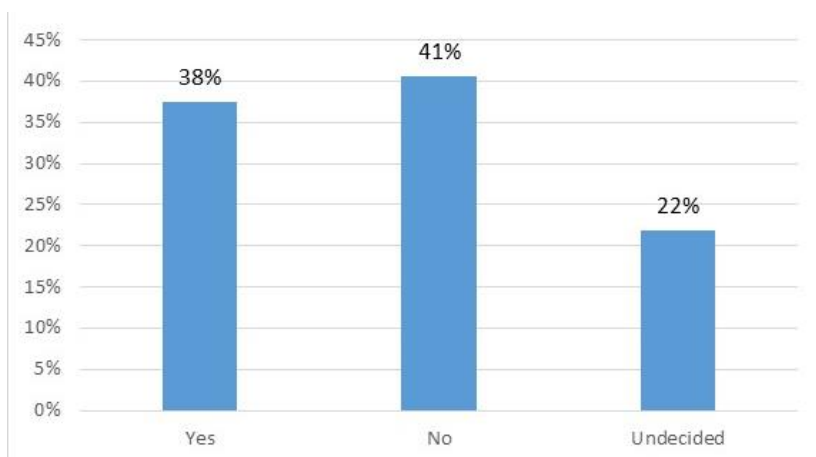
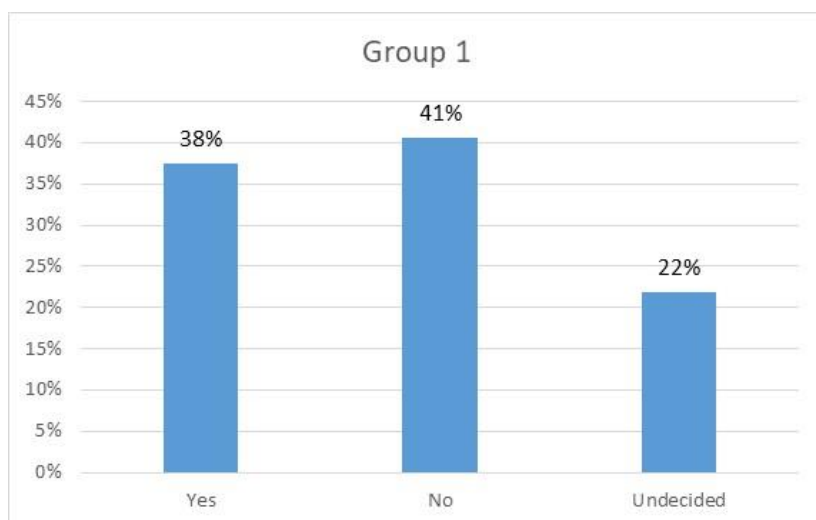
47 per cent respondents in Group 1 would not stay back in the host country if they do not get a job in the host country after completing their studies, 23 per cent would stay back even if they do not get a job and 30 per cent were undecided. In group 2, 71 per cent respondents would return to India if they do not get a job after completing their studies in the host country, 19 per cent would stay back in the host country even after not getting a job and 10 per cent are undecided.

Figure B.17. If you do not get a job, when are you likely to return to India?



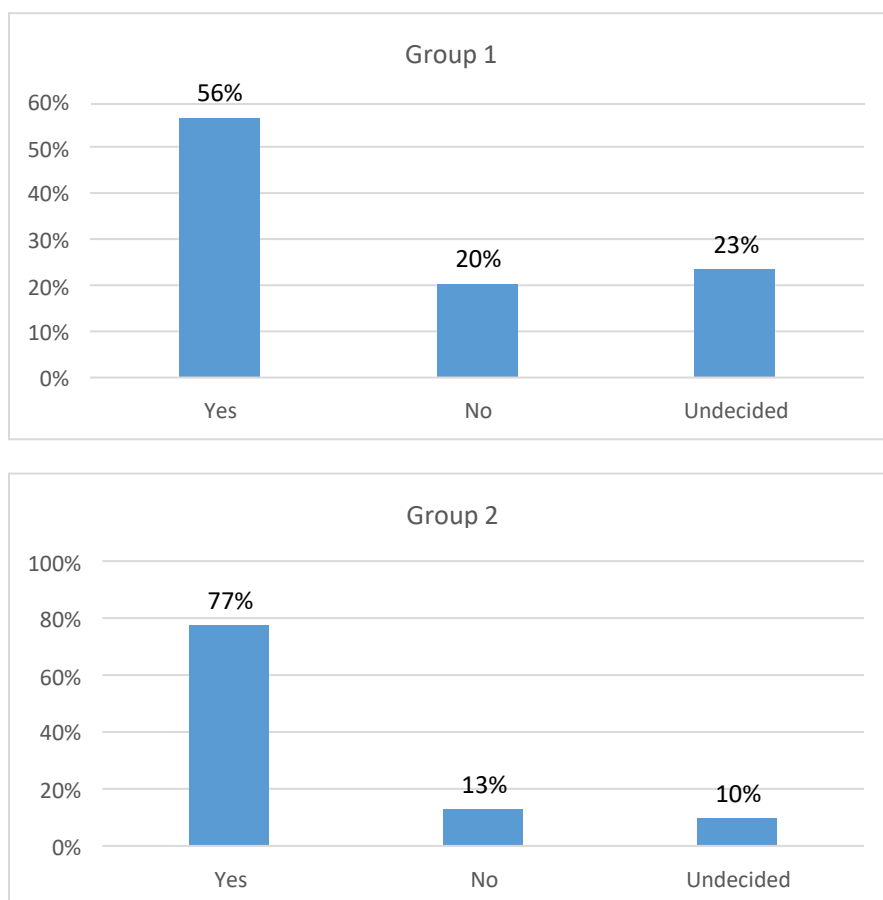
42 and 55 per cent of the respondents in group 1 and 2 respectively would return to India immediately after completing their studies if they do not get a job in the host country. In Group 1, 47 per cent of the respondents would return to India in 1 to 5 years if they do not get a job, 5 per cent in 6 to 10 years and 6 per cent in 21 years or more. However, in group 2 the remaining 45 per cent of the respondents would return to India in 1 to 5 years if they do not get a job in the host country.

Figure B.18. If you get a job in the host country, would you still prefer to return to India?



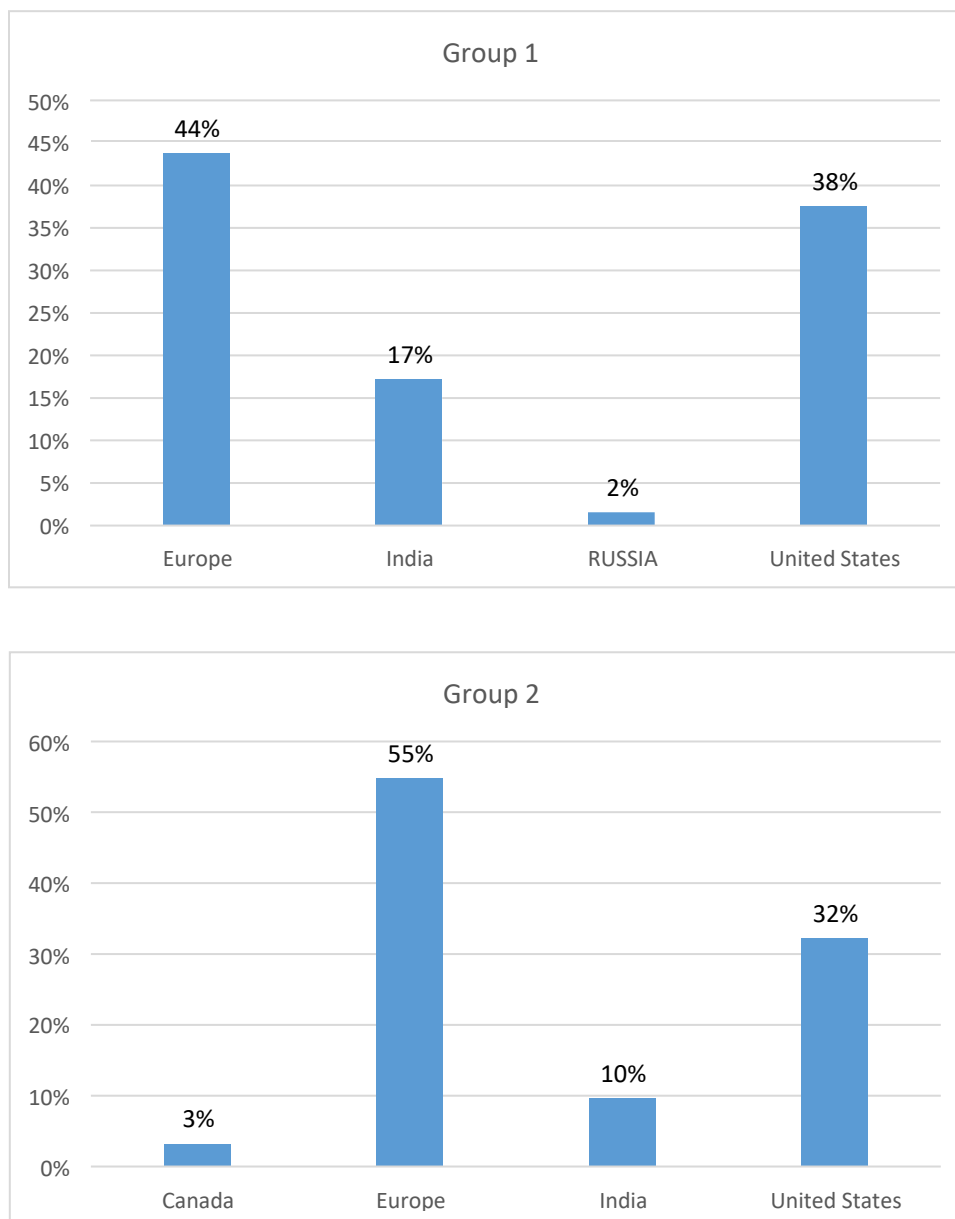
In group 1 38 per cent of the respondents would still prefer to return to India even after getting a job in the host country, 41 per cent would not and 22 per cent were undecided. In group 2, 42 per cent of the respondents would still prefer to return to India even after getting a job in the host country, 32 per cent would not and 26 per cent were undecided.

Figure B.19. Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?



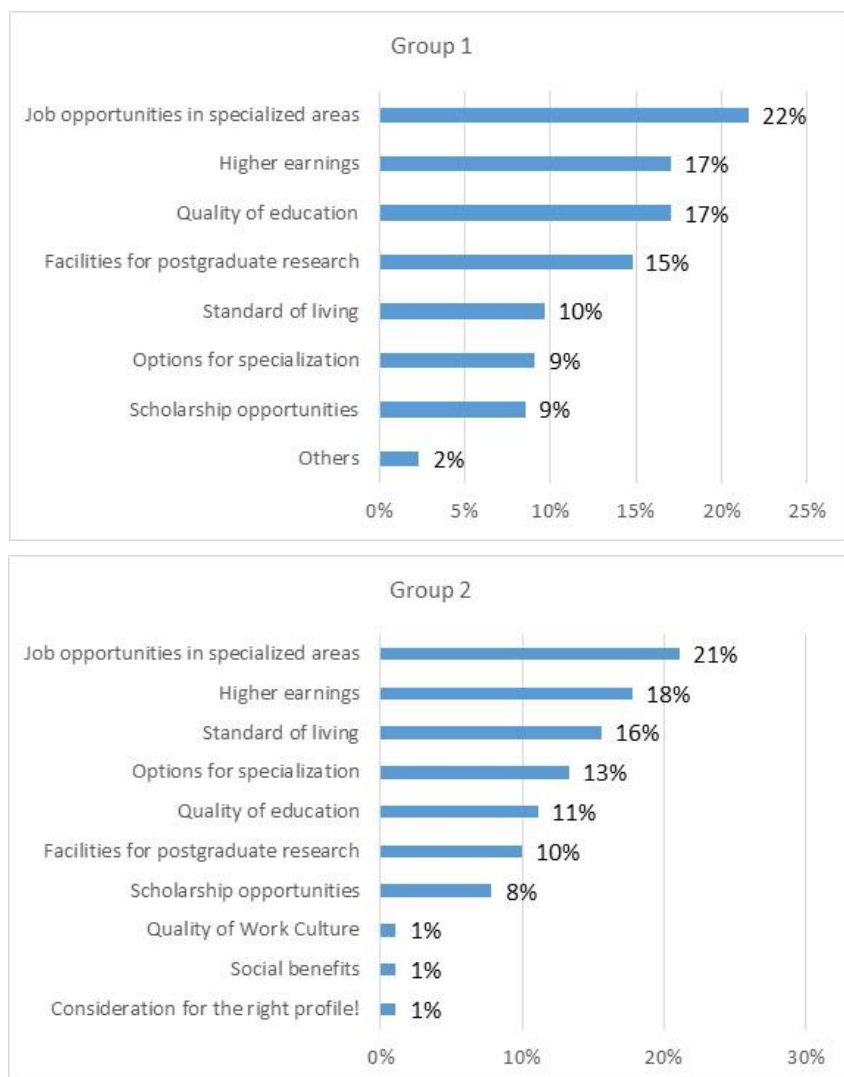
56 per cent respondents in group 1 would return to India after completing their studies if they would find a job in India based on their educational qualifications or area of specialization, 20 per cent would not and 23 per cent were undecided. In group 2, 77 per cent of the respondents would return to India studies if they would find a job in India based on their educational qualifications or area of specialization, and 13 per cent would not and 10 per cent were undecided.

Figure B.20. Based on your educational qualifications/area of specialization, where do you see better job opportunities?



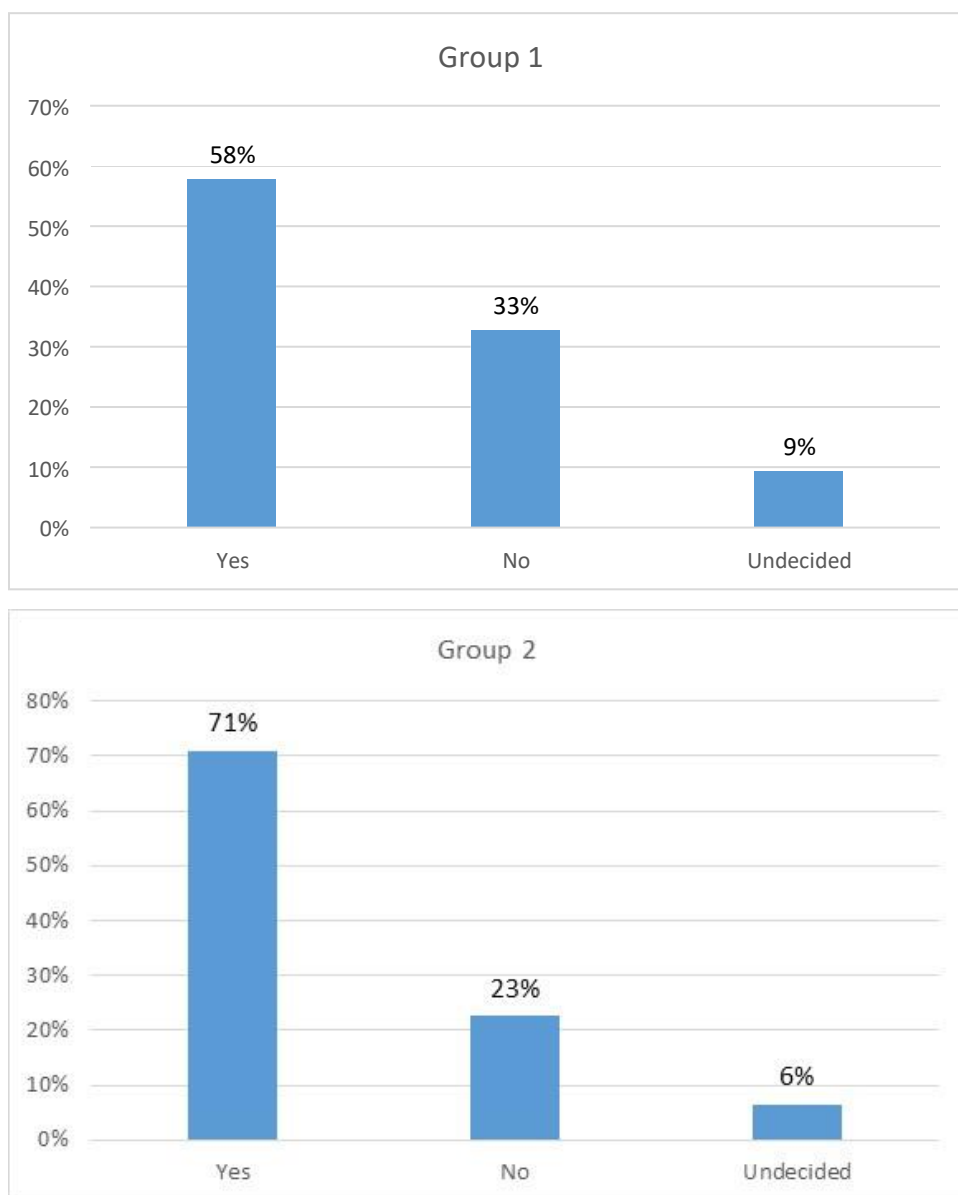
44 per cent of respondents in group 1 feel there are better job opportunities in Europe based on their educational qualifications or area of specialization, 38 per cent feel better job opportunities are in the United States followed by 17 per cent who feel India has better job opportunities. In group 2, 55 per cent respondents feel there are better job opportunities in Europe based on their educational qualifications or area of specialization, 10 per cent feel India has better job opportunities, followed by 32 per cent respondents who feel the United States has better job opportunities.

Figure B.21. According to your opinion, from the following, what does India lack that could be the main reasons for emigration of Indian students?



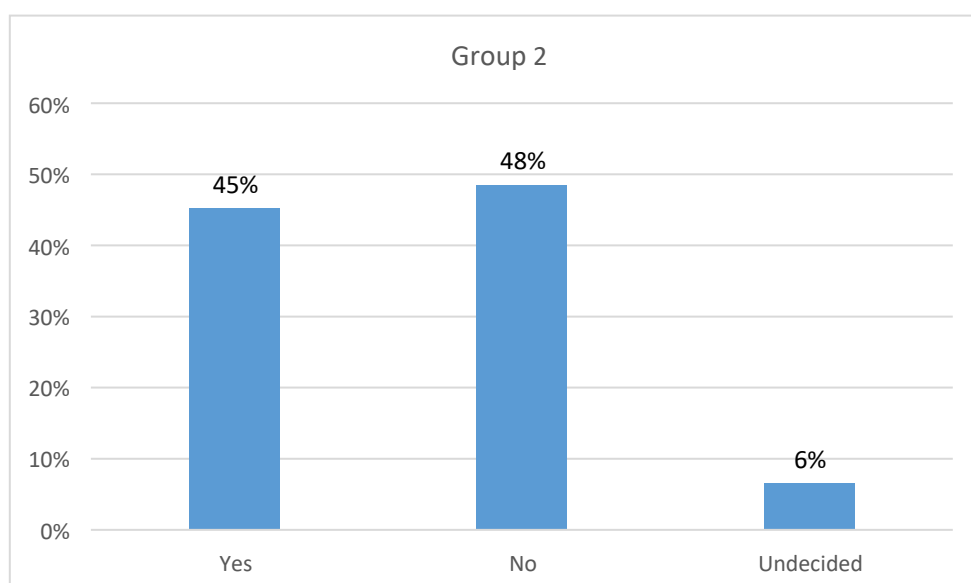
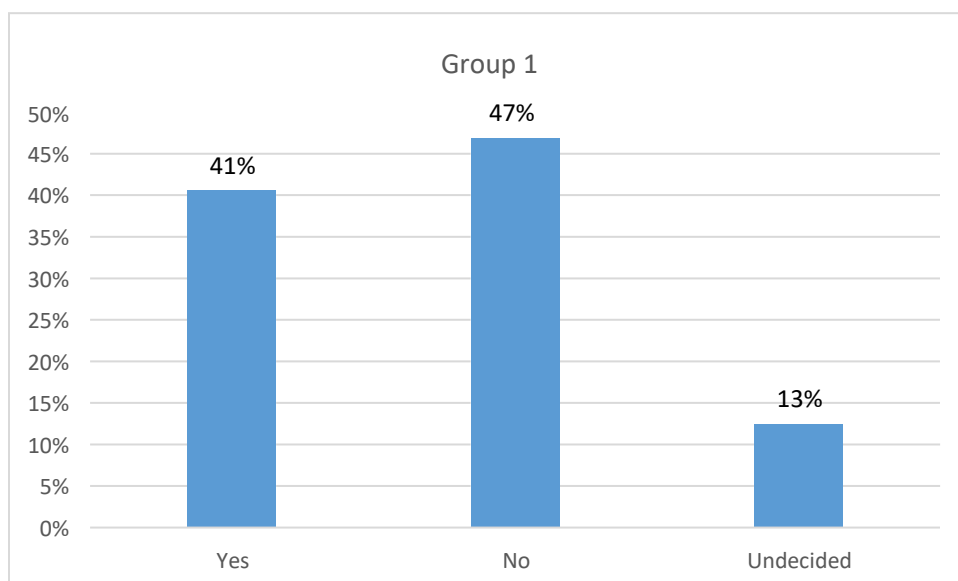
According to respondents in both group 1 and 2, the four main factors that could be the reasons for emigration of Indian students to foreign countries are lack of job opportunities in specialised areas, possibilities of higher earnings, standard of living in foreign countries and quality of education provided by foreign universities. Also, many respondents believe that facilities for postgraduate research provided by foreign universities and institutions are better than those in India and this could also be an important cause of emigration of Indian students.

Figure B.22. If all Indian educational degrees were internationally recognized, would you still want to study abroad?



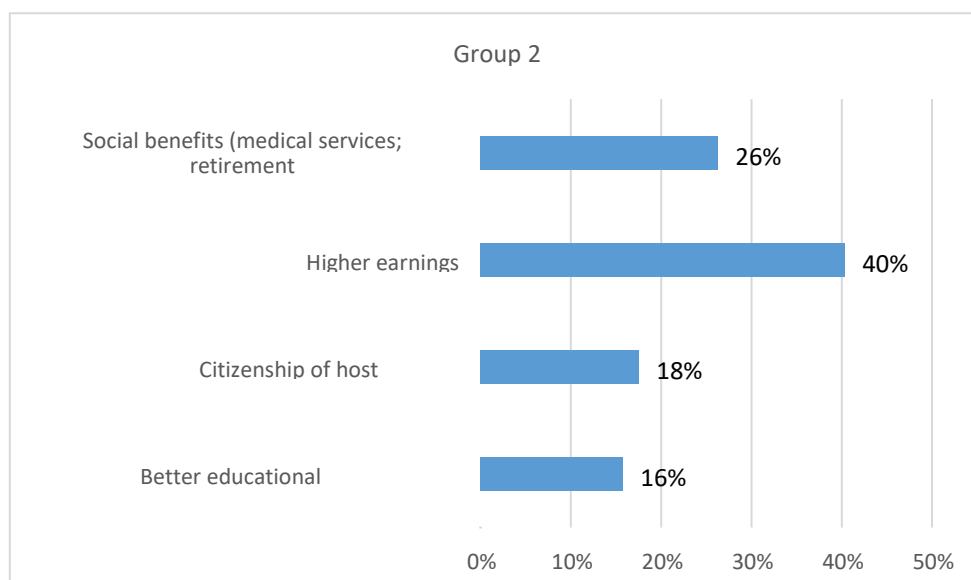
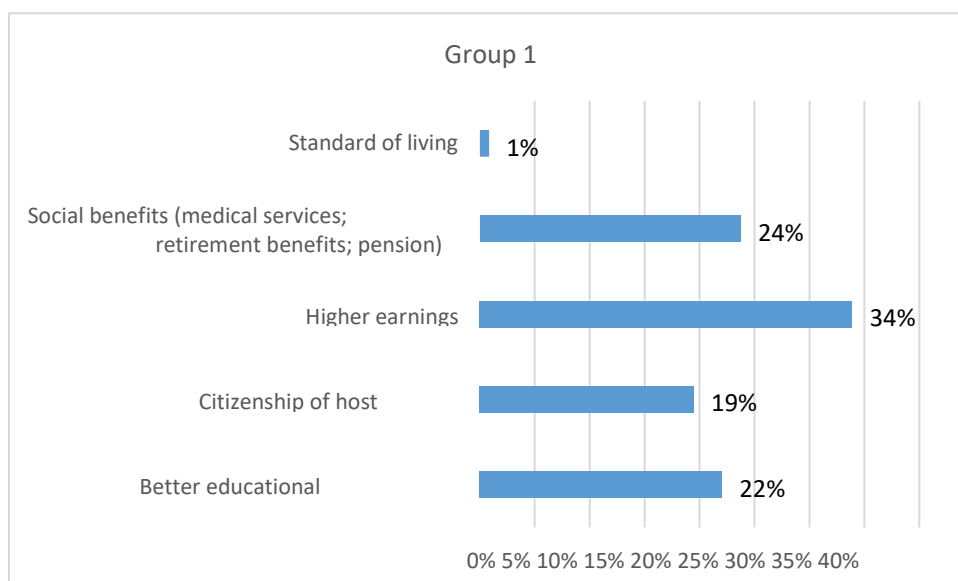
58 per cent of respondents in group 1 would still want to study abroad even if all Indian degrees were internationally recognized, 33 per cent do not and 9 per cent are undecided. However, 71 per cent of respondents in group 2 would still want to study abroad even if all Indian degrees were internationally recognized, 23 per cent do not and 6 per cent are undecided.

Figure B.23. If quality of education in India was at par with international universities, would you still want to study abroad?



47 per cent respondents in group 1 would still want to study abroad if quality of education in India was at par with international universities, 41 per cent would not prefer to study abroad and 13 per cent are undecided. In group 2, 48 per cent of the respondents would still want to study abroad if quality of education in India was at par with international universities, 45 per cent would not prefer and 6 per cent are undecided.

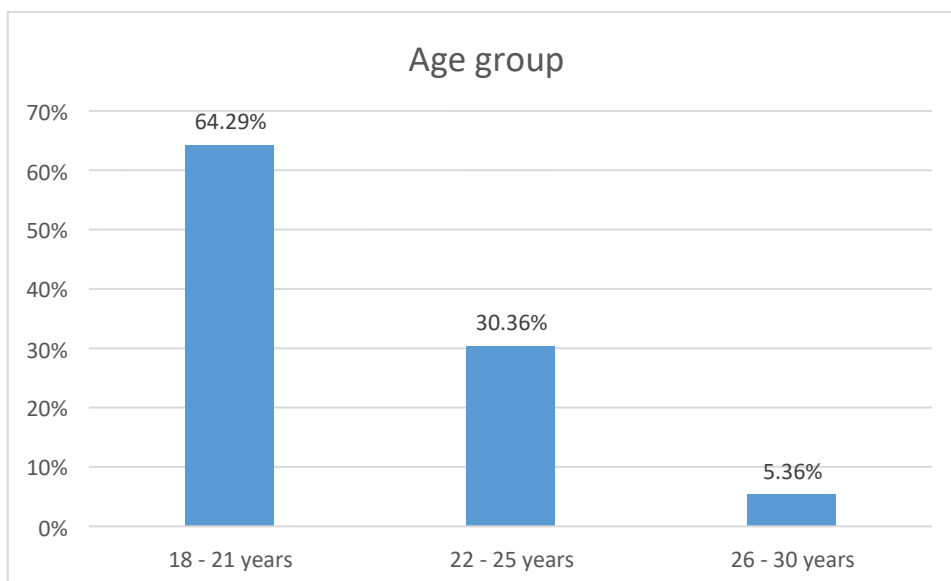
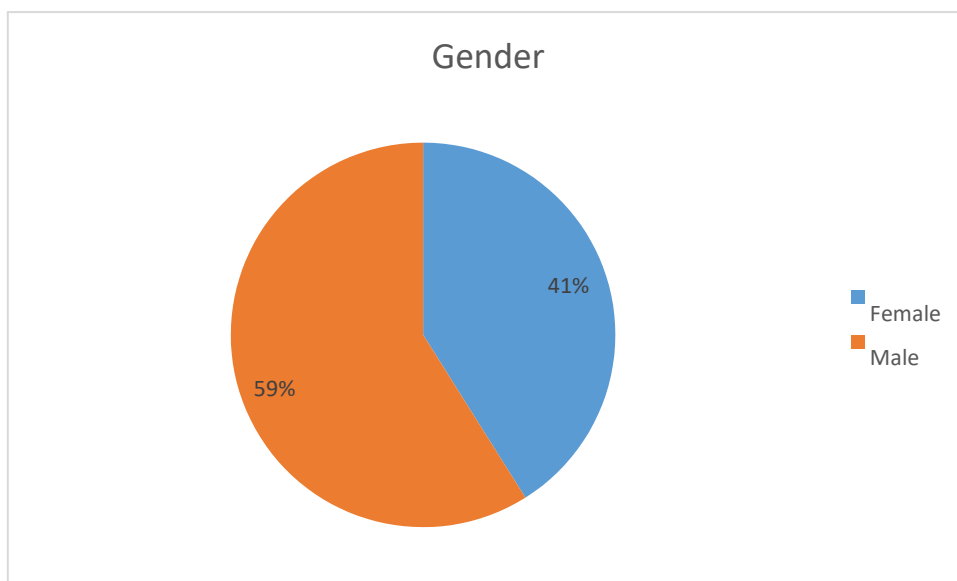
Figure B.24. From the following which factors according to you would be influential in choosing to permanently settle in the host country?



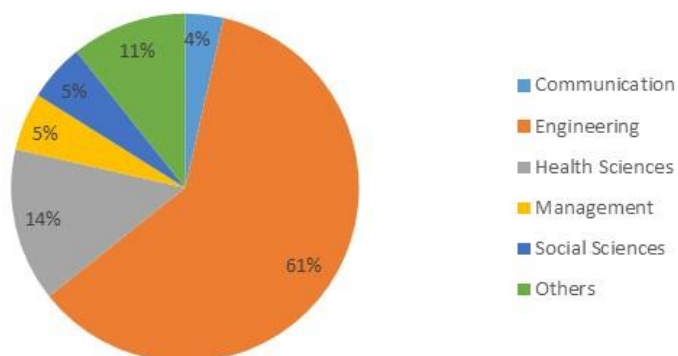
According to respondents in group 1 and group 2, the main two factors that would be influential in choosing to permanently settle in the host country are higher earnings and social benefits.

Part 2 – Survey year 2016

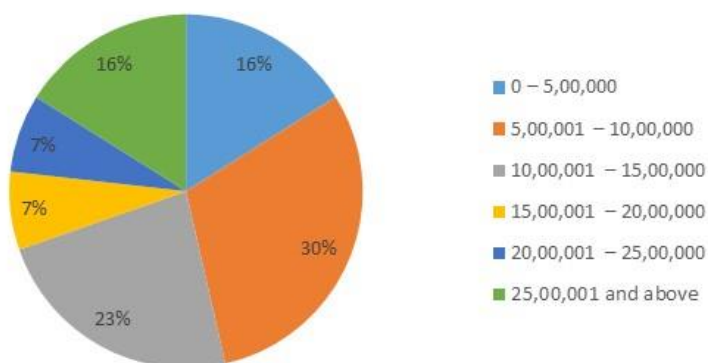
Figure C.1. Sample Profile - Group 1 – Students in India



Field of Study (Current)



Family annual income



Where are you from?

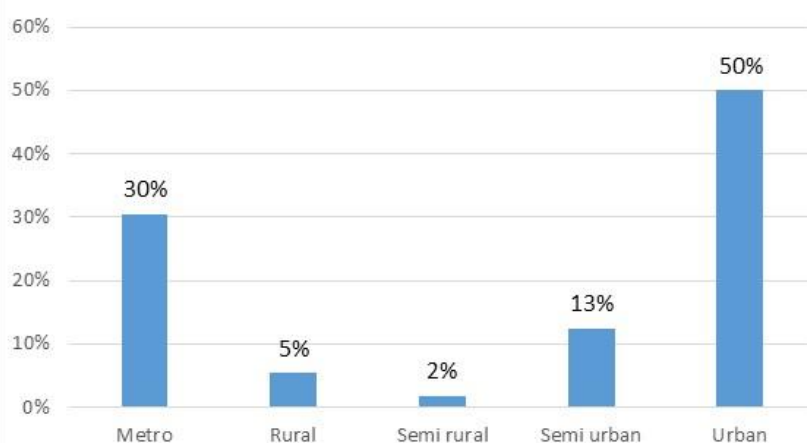


Figure C.2.: Do you want to study abroad?

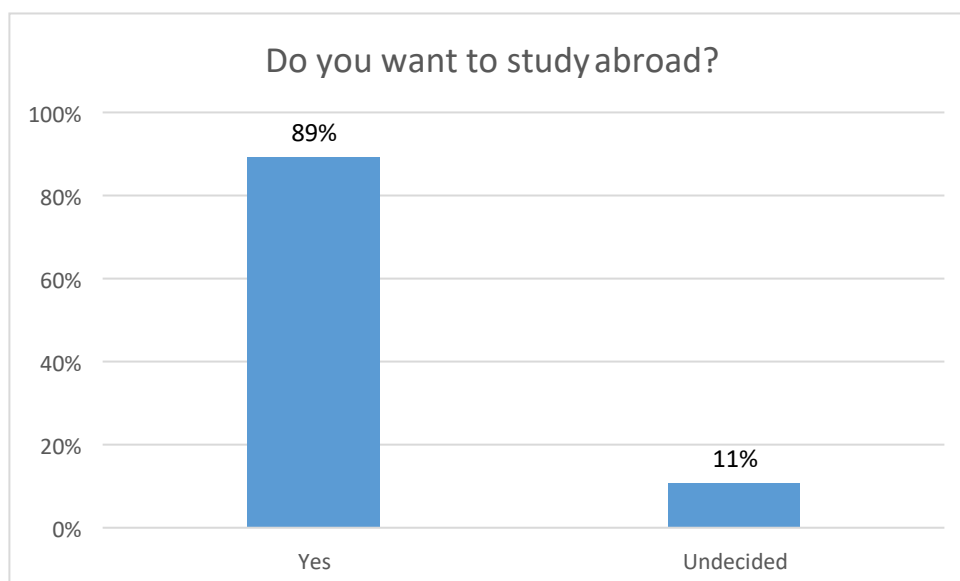


Figure C.3.: Do you currently have a plan to study abroad?

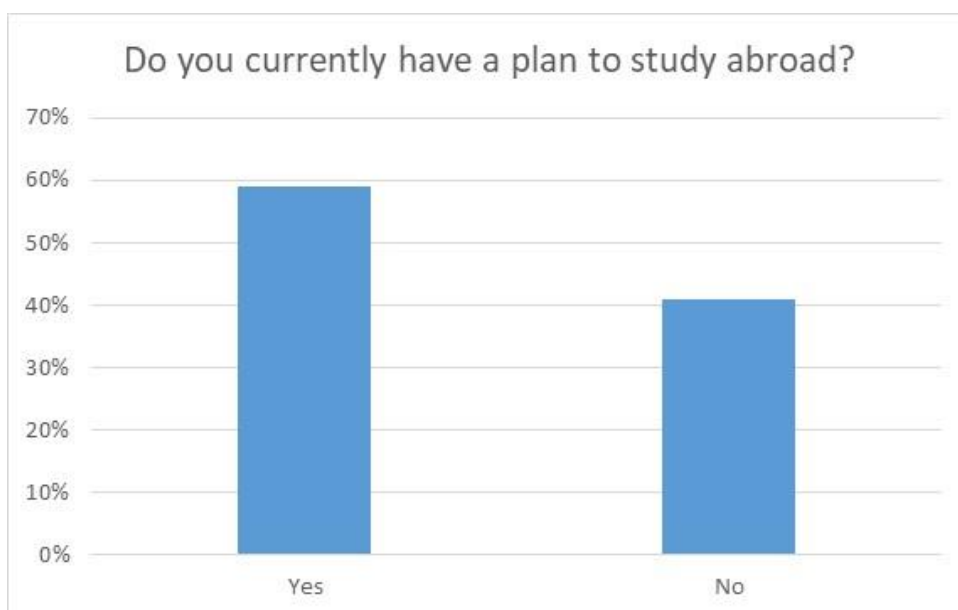
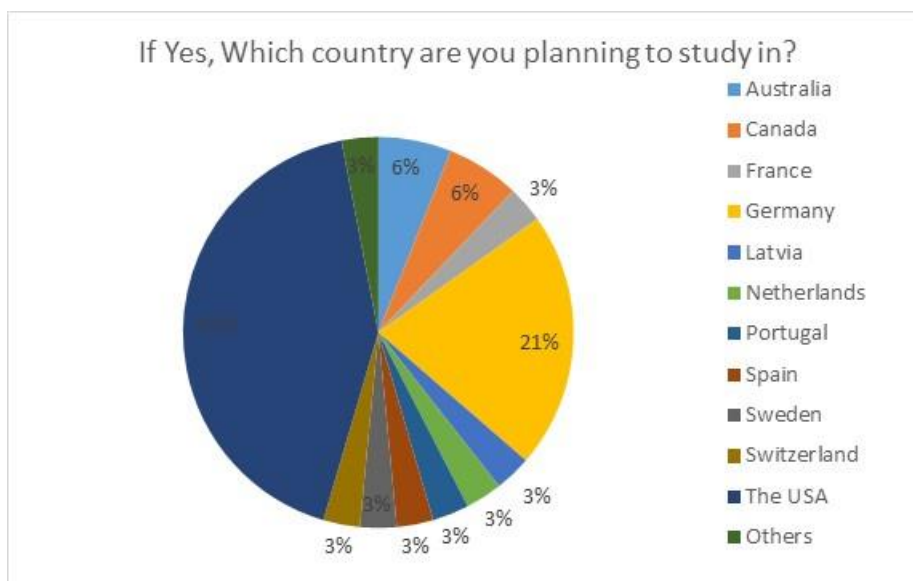
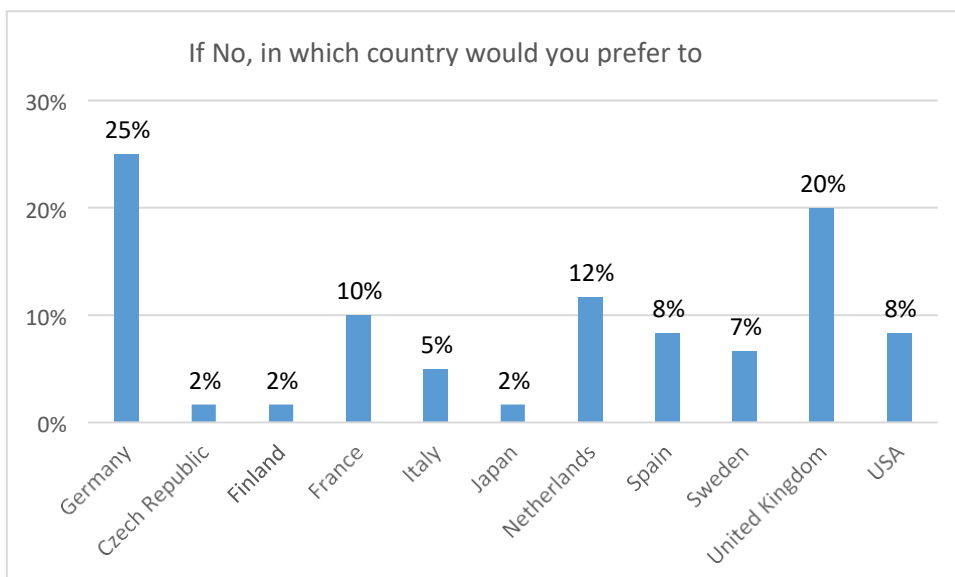


Figure C.4.: If yes, which country are you planning to study in?



Out of the respondents who answered yes i.e. they currently have a plan of studying abroad are mainly going to non-European countries, especially The United States. About 21 per cent of the respondents were planning to study in Germany and some also were planning to go to other European countries.

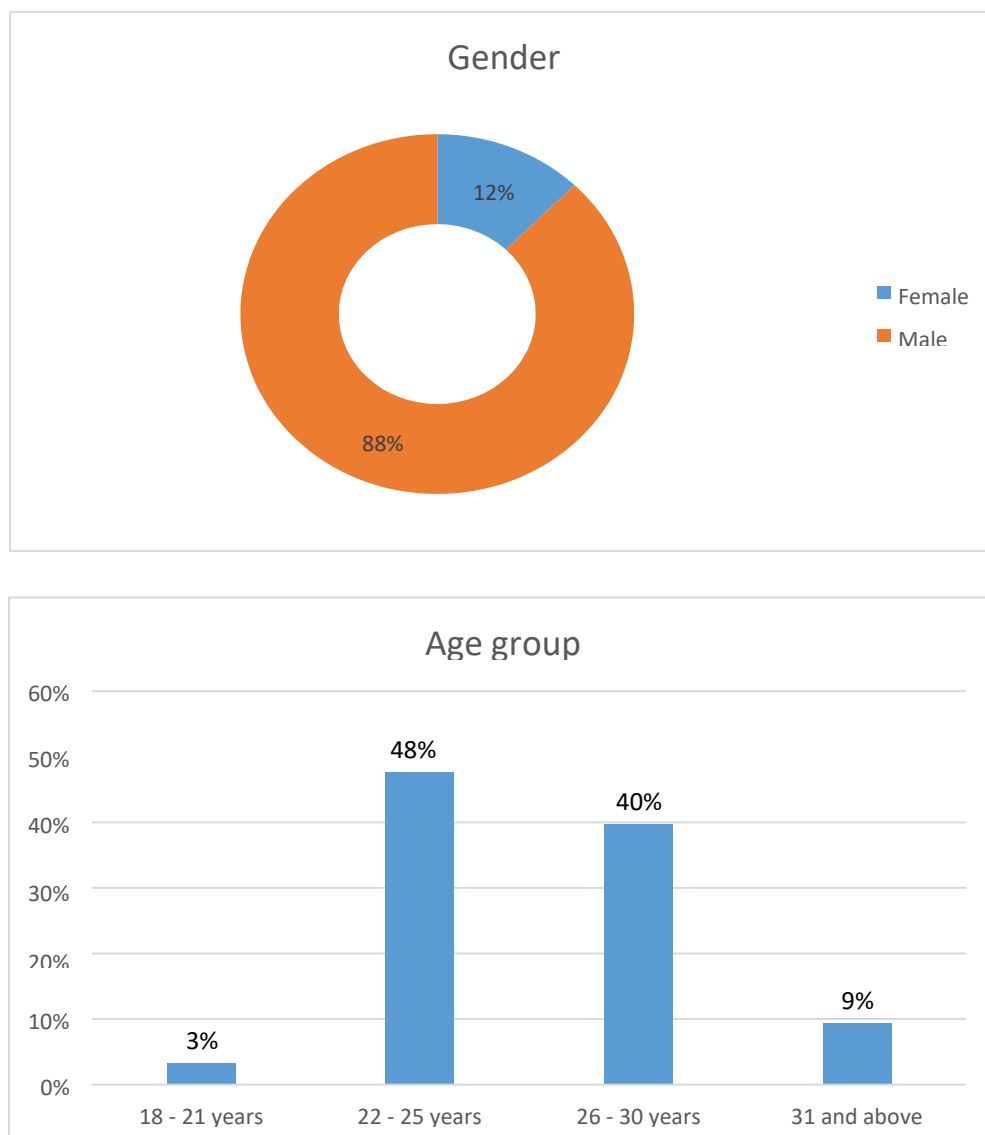
Figure C.5. If no, which country would you prefer to study?



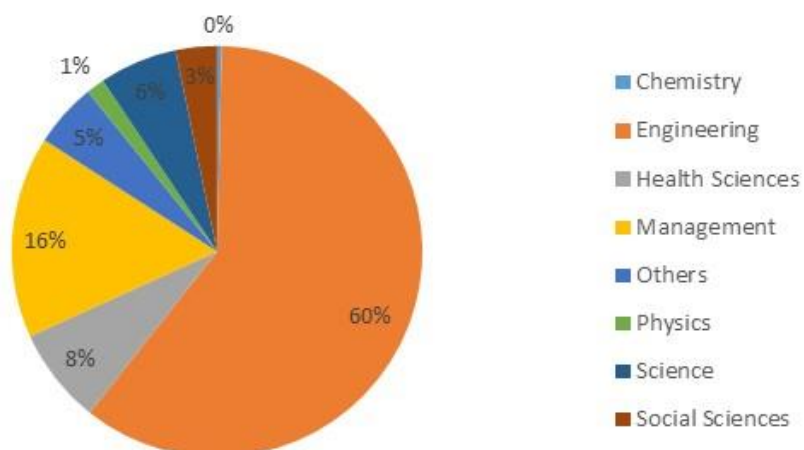
To respondents who did not have a plan to study abroad, but wanted to study abroad, multiple choices of countries were given to gauge their preferred destination. 25 per cent of the respondents preferred to go to Germany, followed by 20 per cent to the United Kingdom, and

about 10 per cent to France and 12 per cent to the Netherlands.

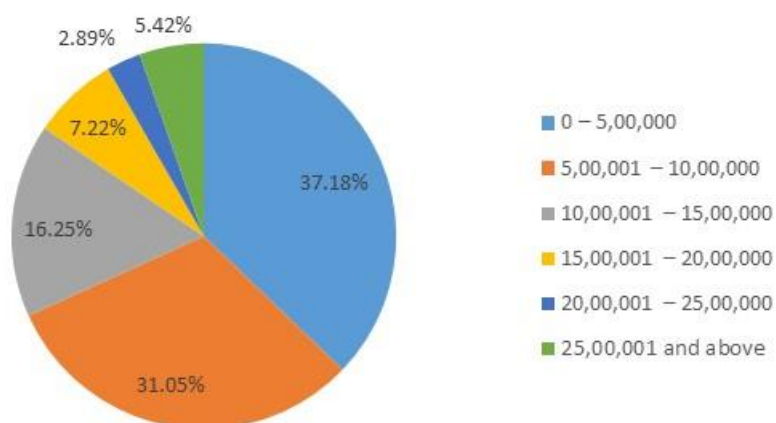
Figure C.6. Sample Profile – Group 2 – Indian students in Europe



Field of Study (Current)



Family annual income



Origin

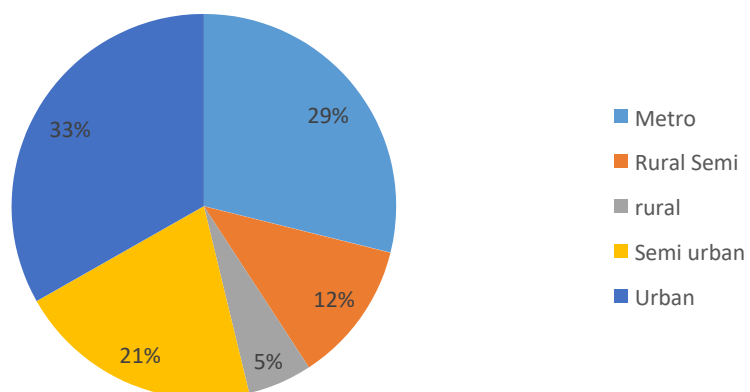
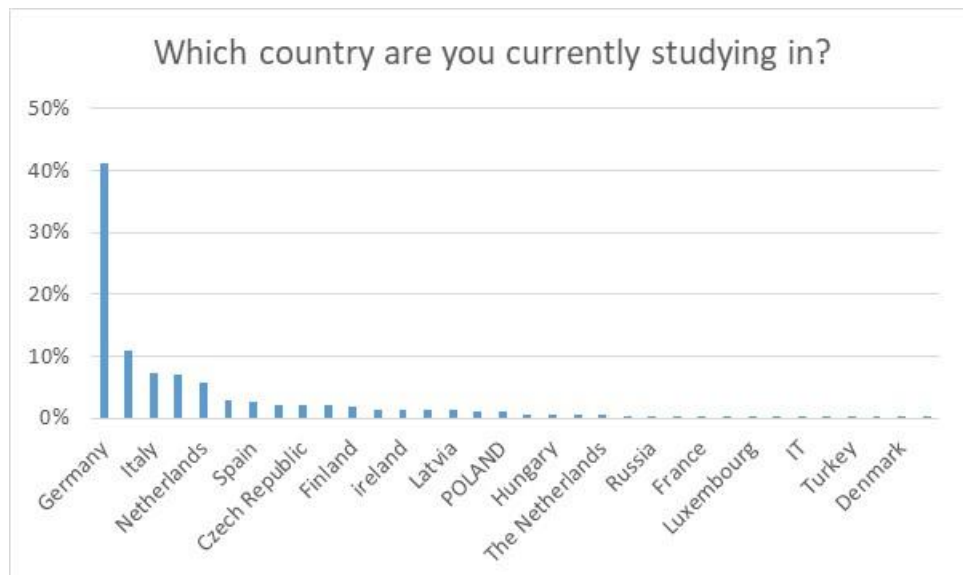


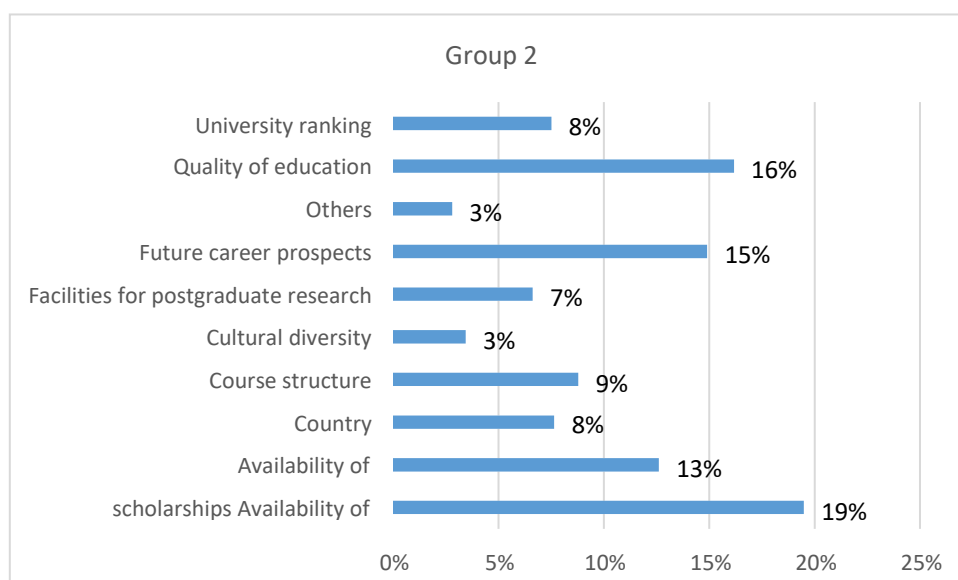
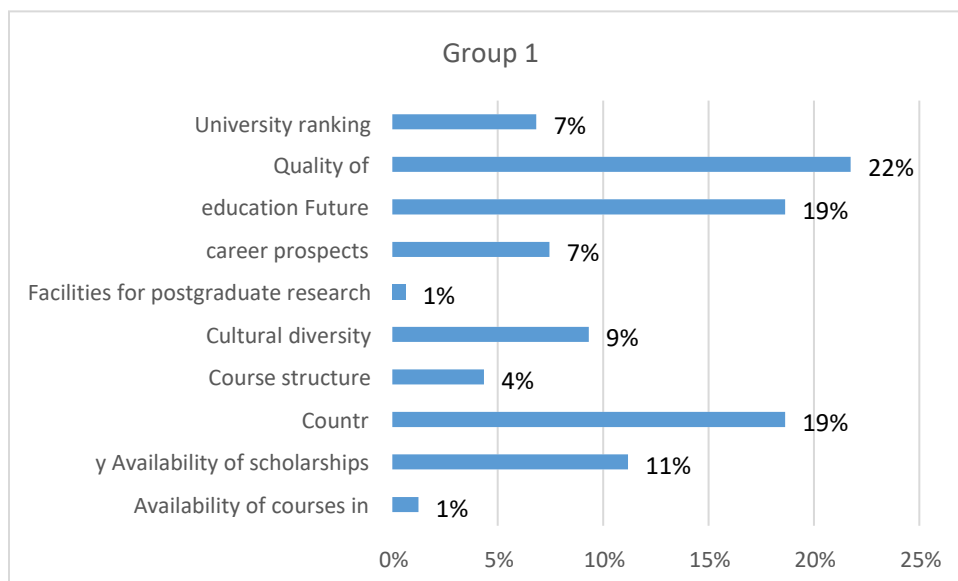
Figure C.7.: Which country are you currently studying in?



Currently, 41 per cent of the respondents are studying in Germany and 12 per cent of the respondents are studying in France. 8 per cent of the respondents are studying in Sweden followed by 7 per cent in Netherlands and Italy. In this survey study it was found that only 3 per cent of the respondents are studying in the United Kingdom.

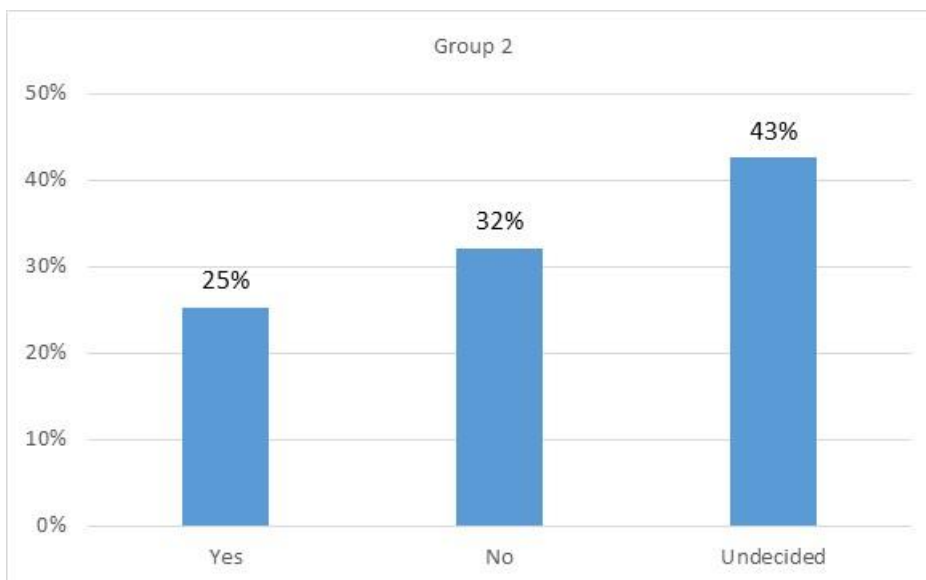
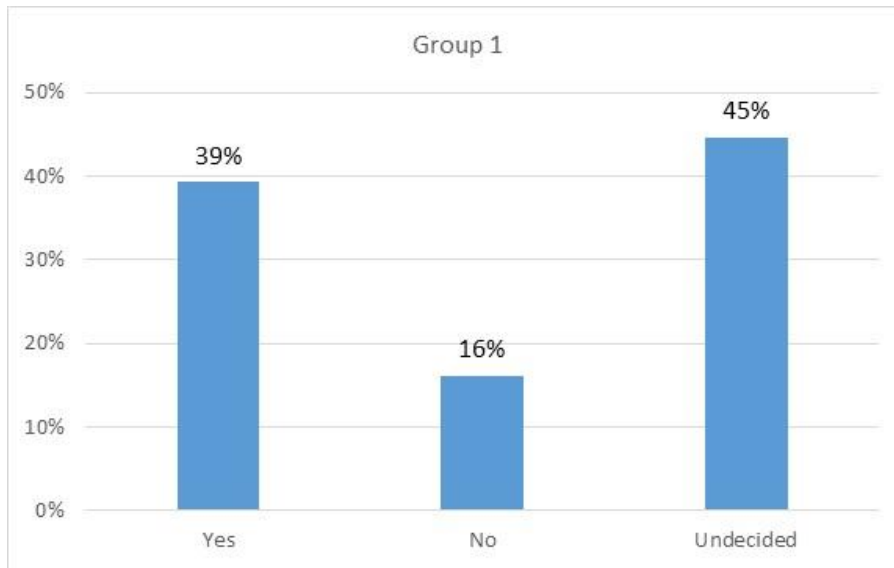
Comparative Analysis and Interpretation of Results

Figure C.8. According to you, which of the following factors could be influential in deciding where and what to study?



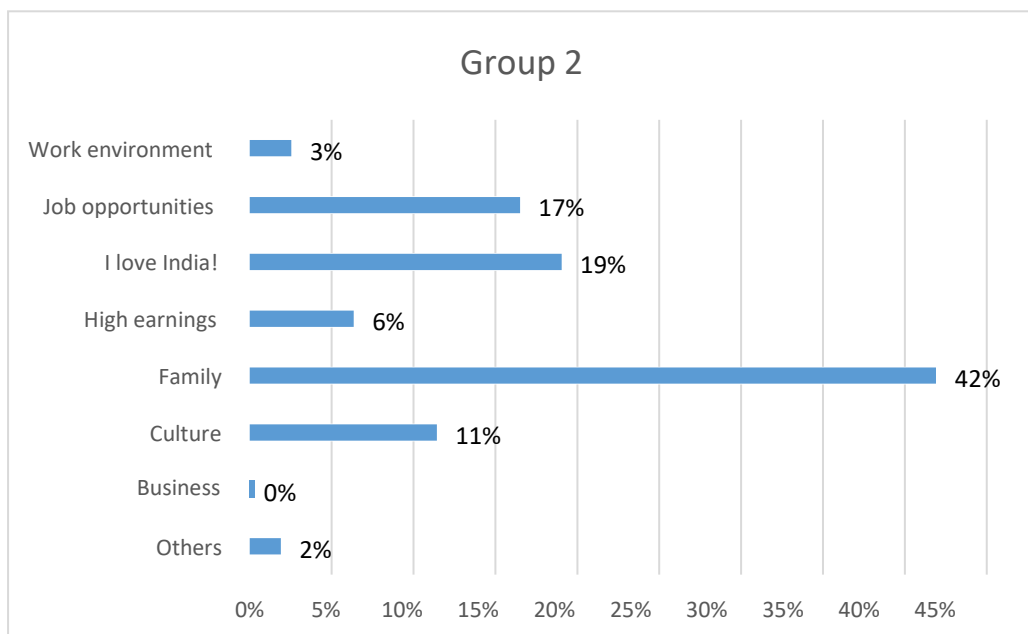
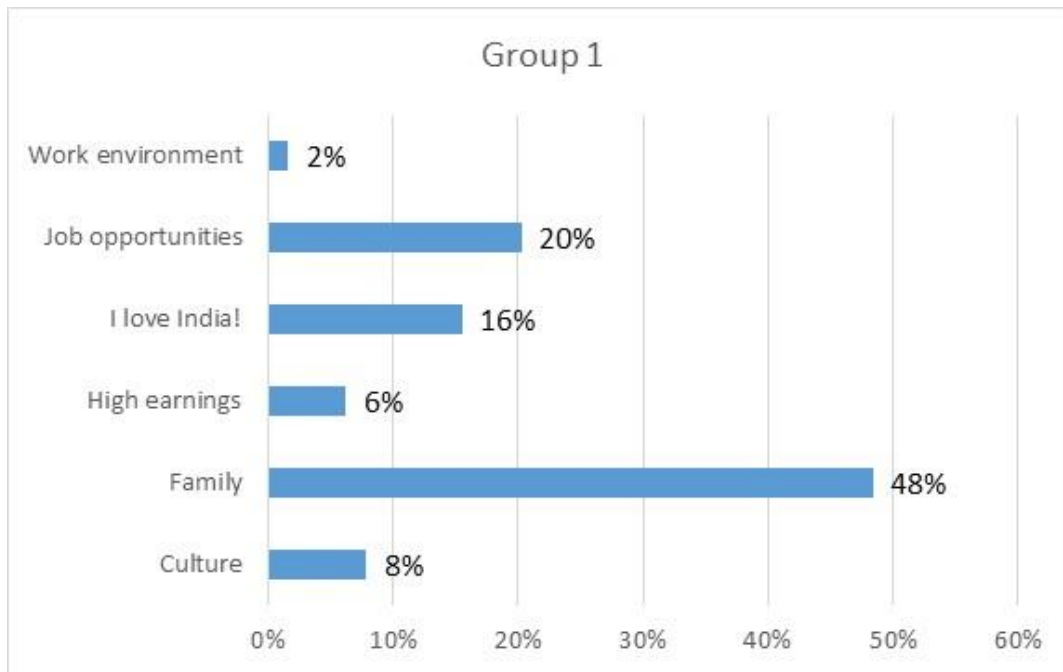
For Group 1, the main three factors that are influential in deciding where and what to study are quality of education, availability of scholarships and future career prospects. For Group 2, the main three factors are availability of courses in English, quality of education and future career prospects for deciding where and what to study.

Figure C.9. Would you return to India after completing your studies in the host country?



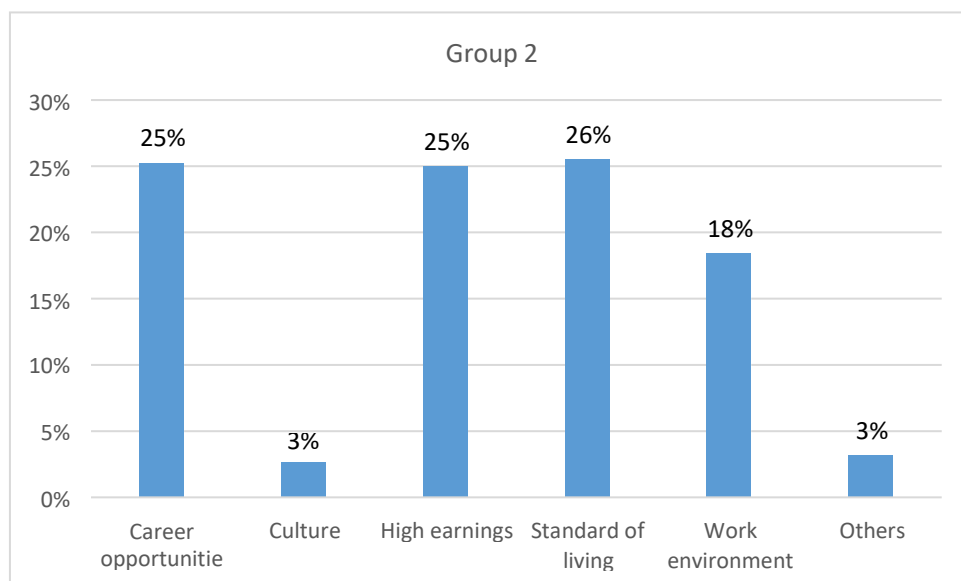
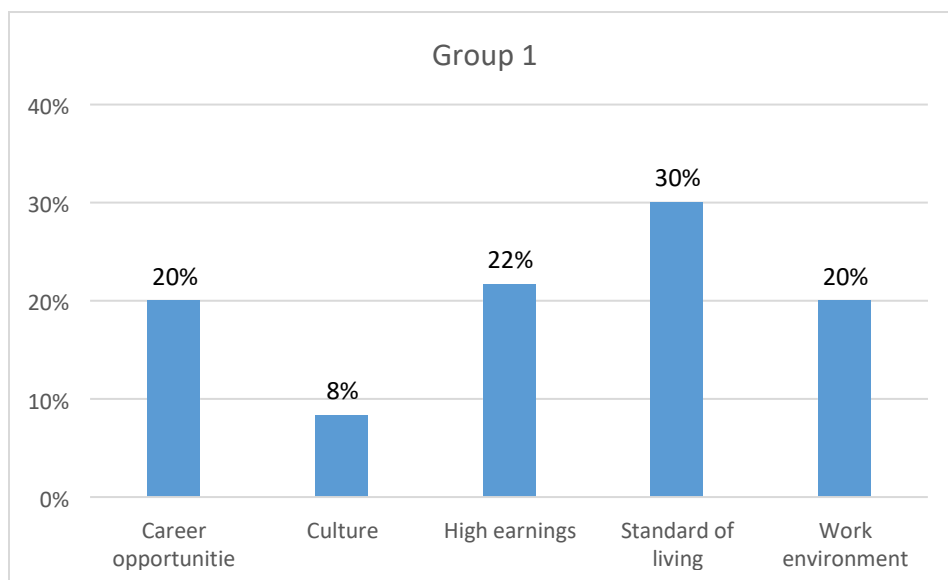
39 per cent of the respondents in group 1 would return to India post completion of studies in the host country, about 45 per cent were undecided and 16 per cent would not return to India after completing their studies. In group 2, 25 per cent students would return to India after completing their studies, 43 per cent undecided and 32 per cent would not.

Figure C.10. If yes, which of these are the factors that would influence your decision in returning to the India?



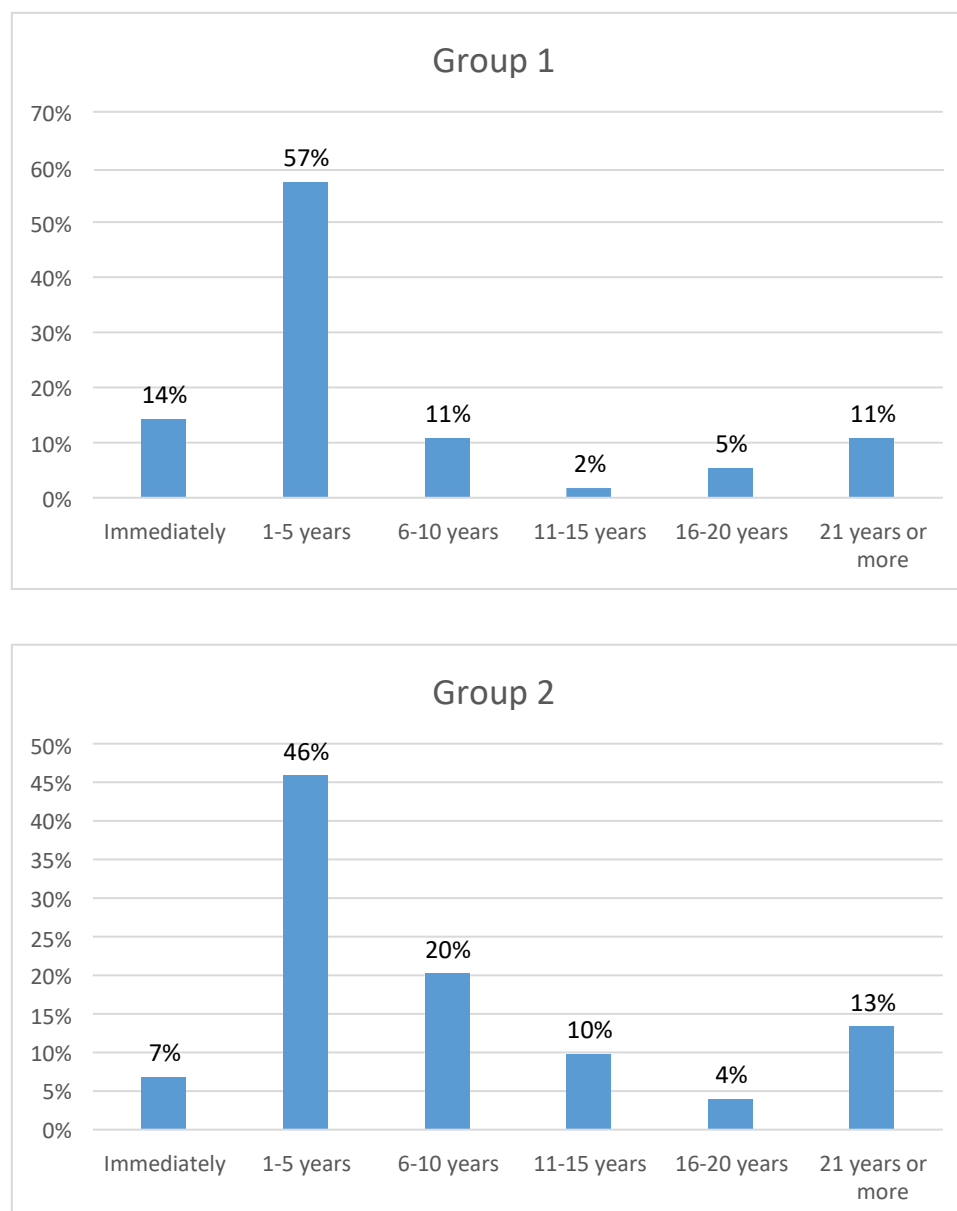
In both groups 1 and 2, the three main factors that would influence the respondents' decision to return to India were Family, their love for India and job opportunities in India. In group 1 family was represented by 48 per cent respondents whereas in group 2 it was represented by 42 per cent respondents. Love for India was represented by 16 per cent and 19 per cent respondents in group 1 and group 2 respectively and job opportunities were represented by 20 per cent and 17 per cent in group 1 and group 2 respectively.

Figure C.11. If No, which of these are the factors that would influence your decision to stay back in the host country?



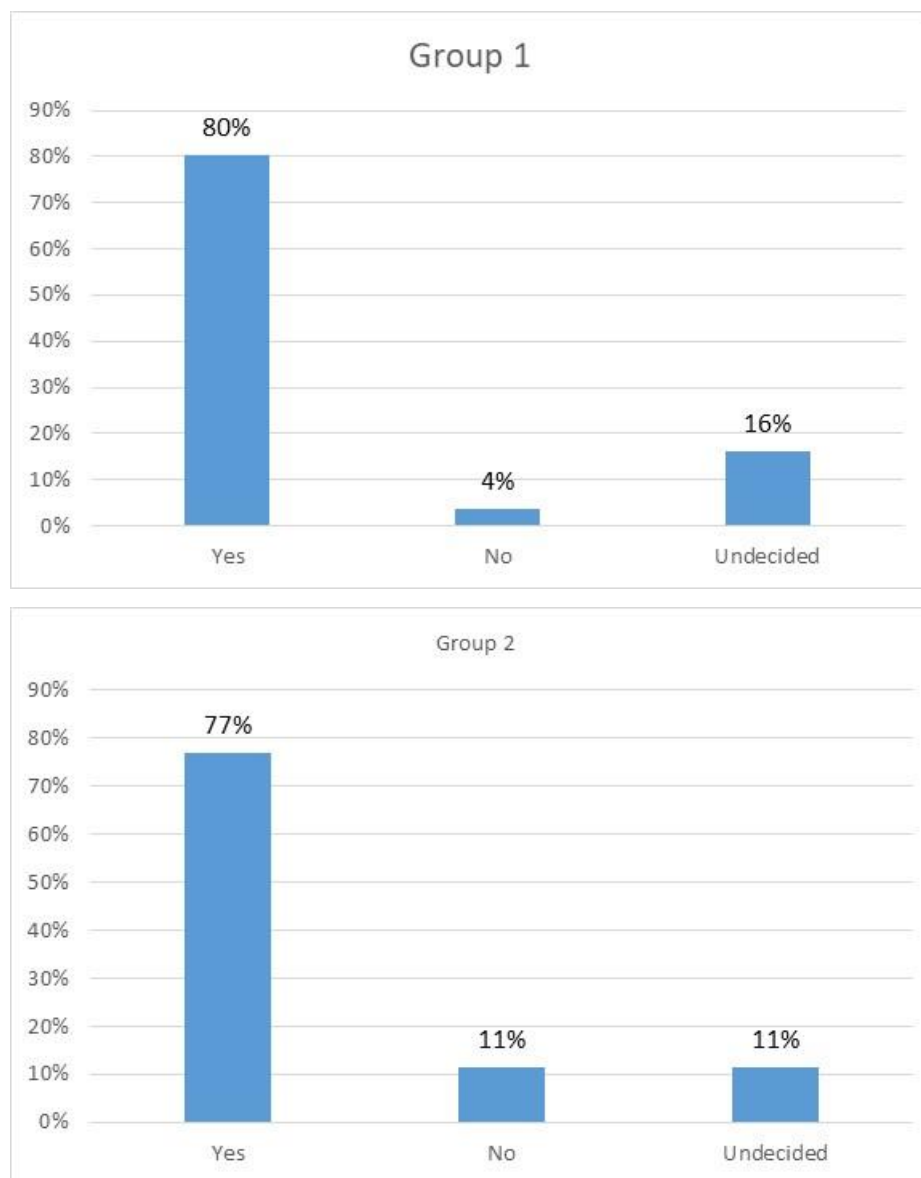
In both groups 1 and 2, the three main factors that would influence the respondents' decision to stay back in the host country and not return to India are higher standard of living, career opportunities in the host country and high earnings.

Figure C.12. After completing your studies, when are you likely to return to India?



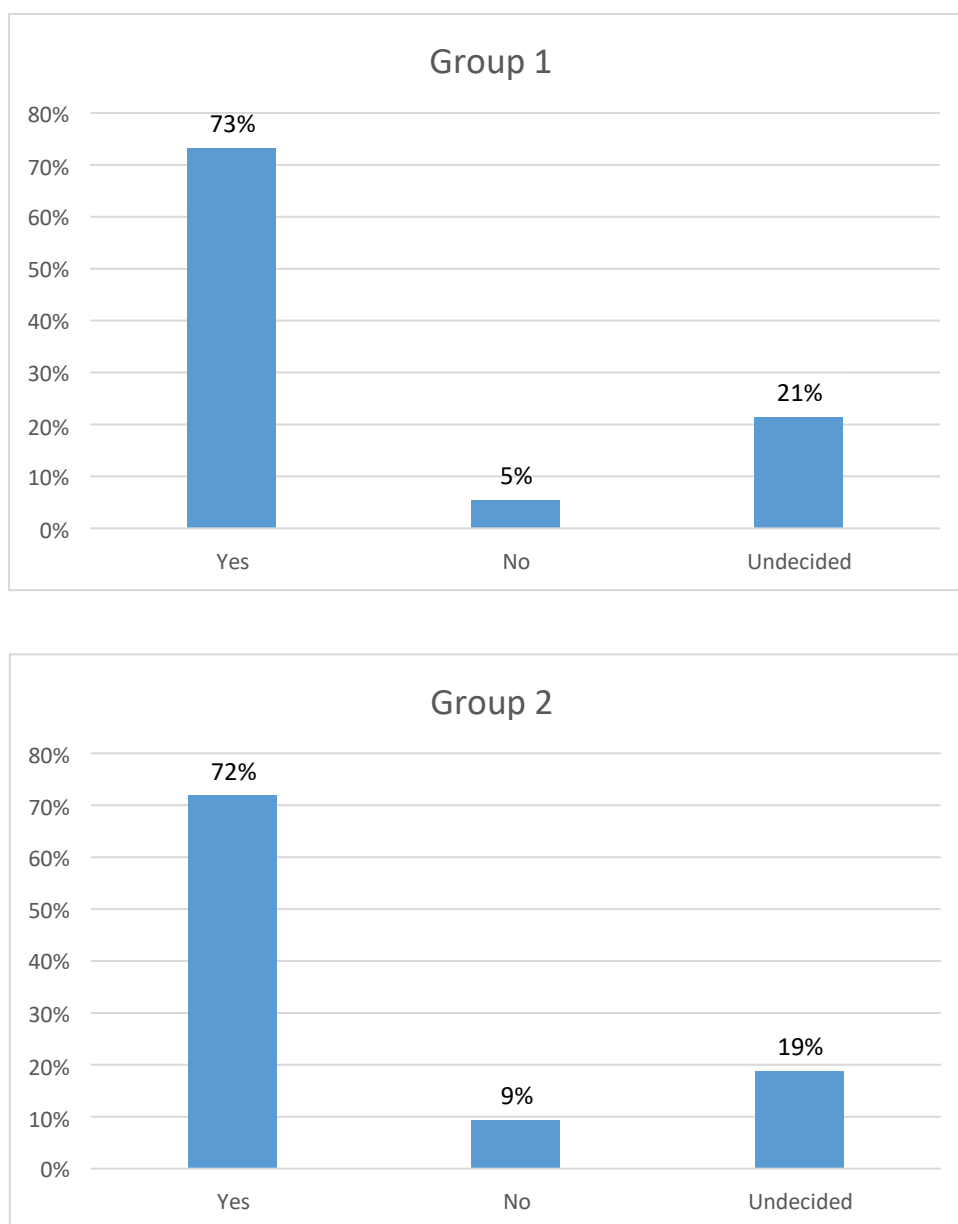
In Group 1, 57 per cent students, which represents the majority, would return to India in 1-5 years and 14 per cent would return immediately. 11 per cent students would return in 6 years to 10 years, 2 per cent in 11 to 15 years, 5 per cent in 16 years to 20 years and 11 per cent in 21 years and more. Similarly, in group 2, 46 per cent of the respondents would return to India in 1 to 5 years. 7 per cent respondents would return immediately. 20 per cent respondents would return in 6 to 10 years. 10 per cent in 11 to 15 years, 4 per cent in 16 to 20 years and 13 per cent would return in 21 years or more. This shows that opinions are similarly represented in both groups and that majority of the students in both groups plan to return to India within 1 to 5 years of completing their studies.

Figure C.13. After completion of your studies, would you look for job opportunities in the host country?



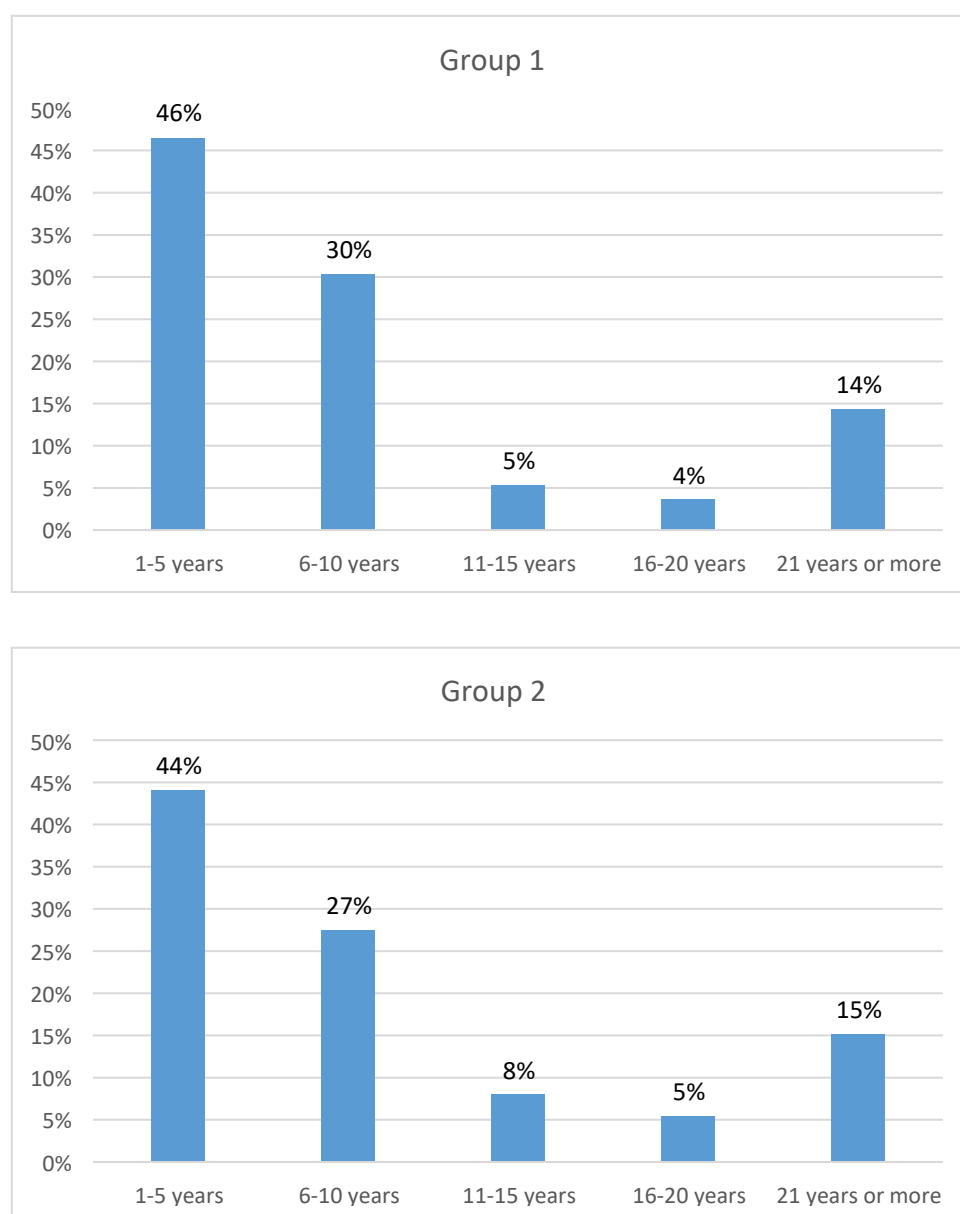
80 per cent of the respondents in group 1 responded that they would look for job opportunities in the host country after completing their studies, 4 per cent would not and 16 per cent were undecided. In group 2, 77 per cent respondents would look for job opportunities, 11 per cent would not and 11 per cent were undecided.

Figure C.14. If you get a job after completing your studies, would you stay back in the host country?



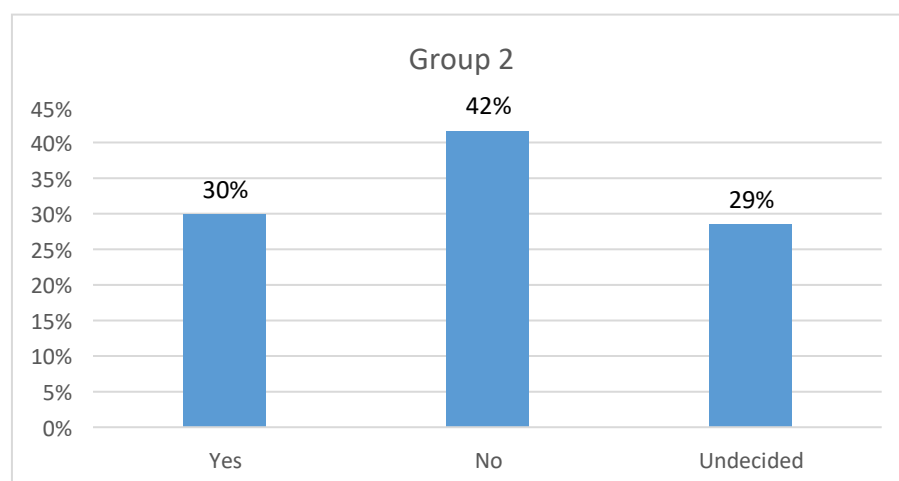
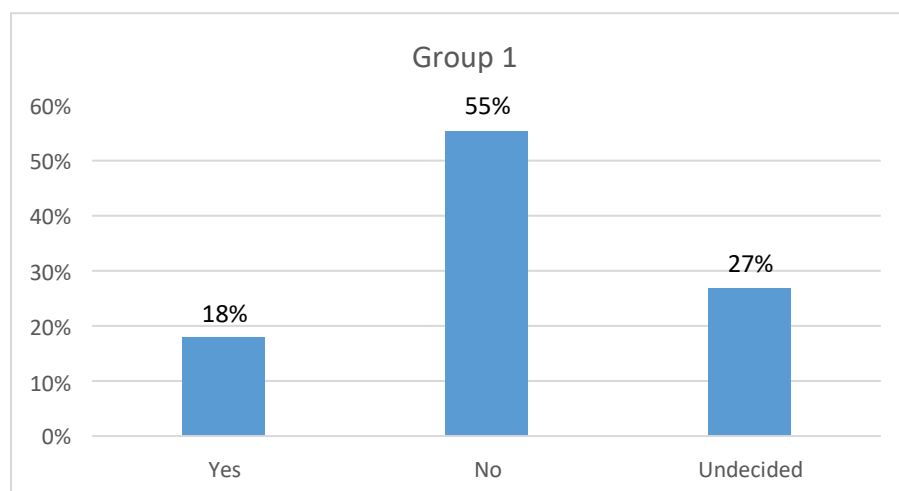
73 per cent respondents in group 1 would stay back in the host country if they got a job in the host country as compared to 72 per cent respondents in group 2. 21 per cent respondents in group 1 and 19 per cent in group 2 remained undecided. 5 per cent respondents in group 1 and 9 per cent in group 2 responded they would not stay back in the host country even if they got a job and would return to India.

Figure C.15. If you get a job, when are you likely to return to India?



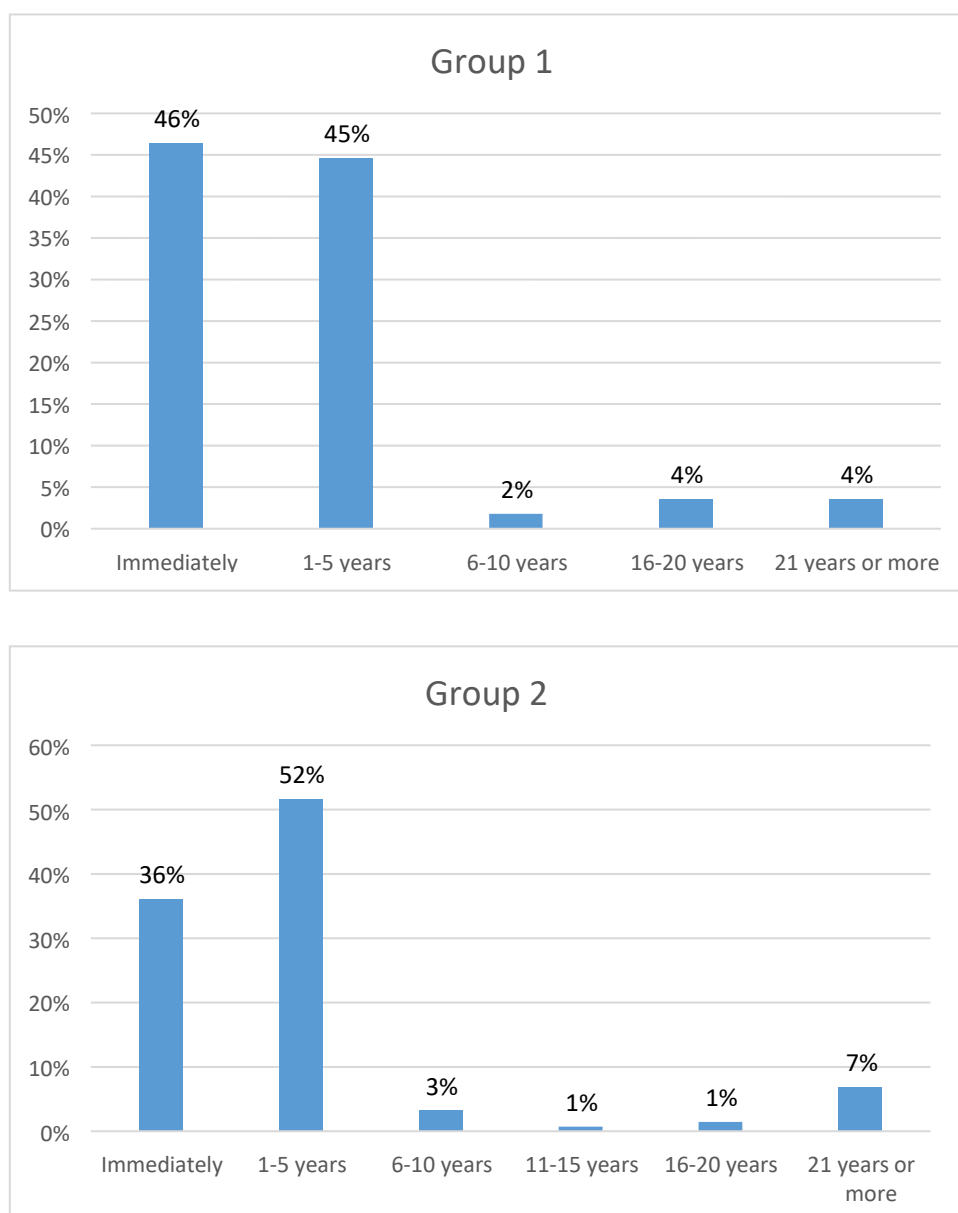
In group 1, 46 per cent respondents would return to India in 1 to 5 years even after getting a job in the host country, 30 per cent in 6 to 10 years, 5 per cent in 11 to 15 years, and 4 per cent in 16 to 20 years and 14 per cent in 21 years or more. However, in group 2, 44 per cent respondents would come back to India in 1 to 5 years even after getting a job in the host country, 27 per cent in 6 to 10 years and 8 per cent in 11 to 15 years and 5 per cent in 16 to 20 years. 15 per cent of the respondents said they would return in 21 years or more.

Figure C.16. If you do not get a job after completing your studies, would you still stay back in the host country?



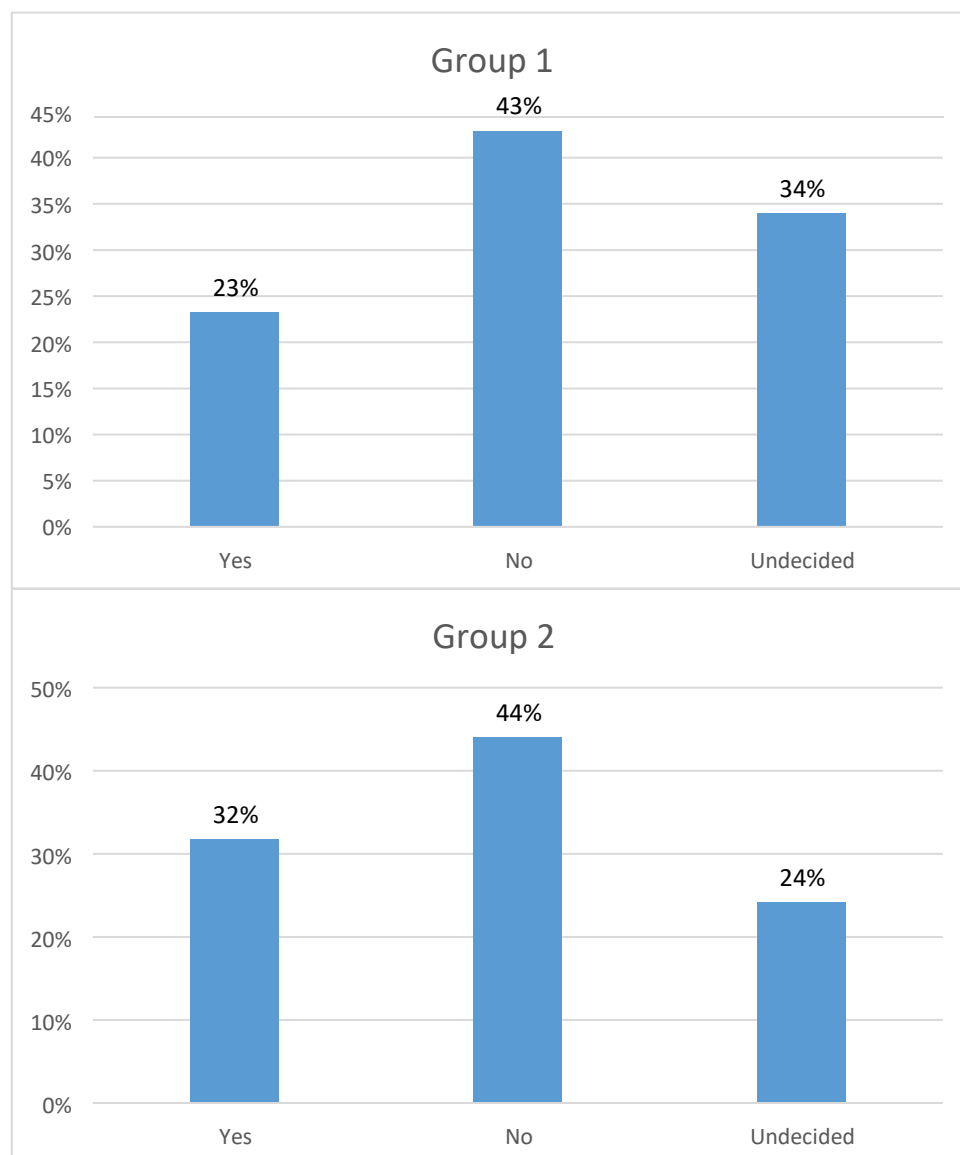
55 per cent respondents in Group 1 would not stay back in the host country if they do not get a job in the host country after completing their studies, 18 per cent would stay back even if they do not get a job and 27 per cent were undecided. In group 2, 42 per cent respondents would return to India if they do not get a job after completing their studies in the host country, 30 per cent would stay back in the host country even after not getting a job and 29 per cent are undecided.

Figure C.17. If you do not get a job, when are you likely to return to India?



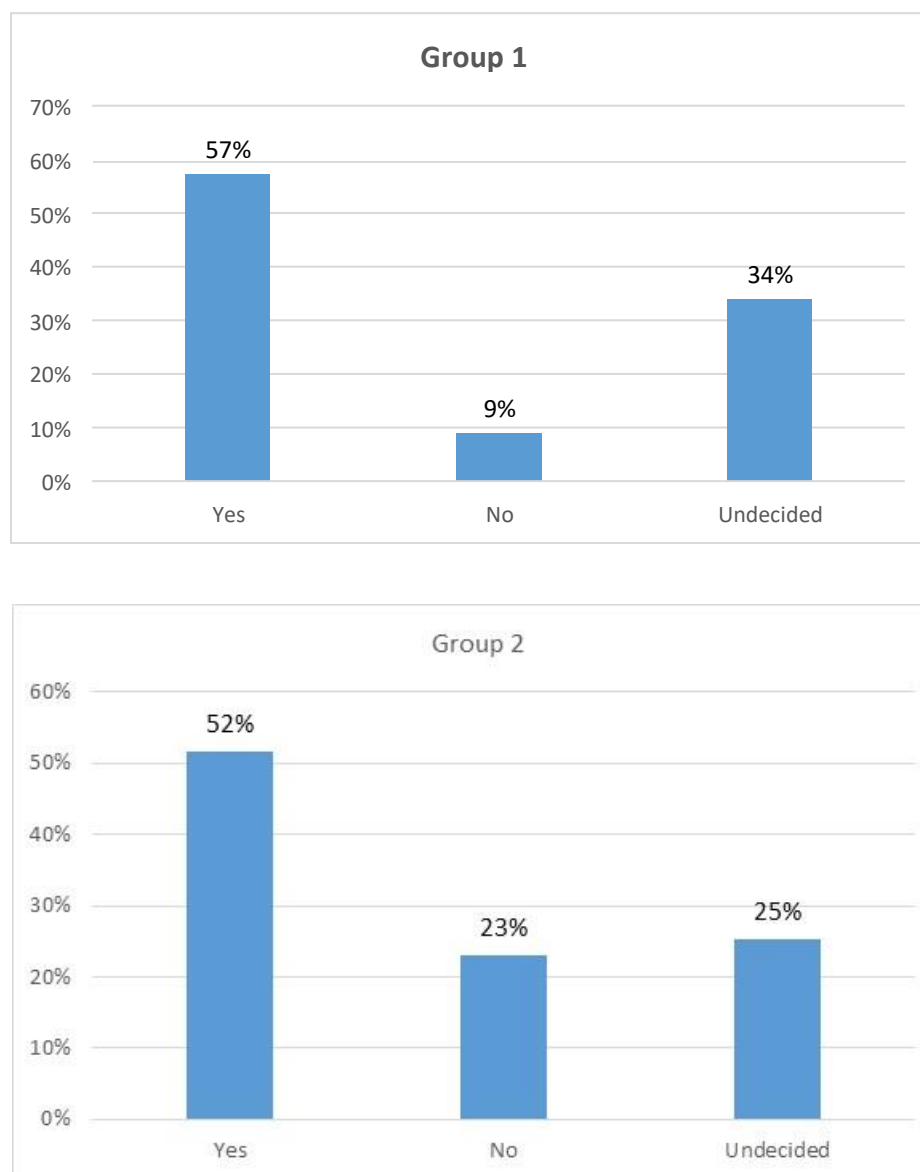
46 and 36 per cent of the respondents in group 1 and 2 respectively would return to India immediately after completing their studies if they do not get a job in the host country. In Group 1, 45 per cent of the respondents would return to India in 1 to 5 years if they do not get a job, 2 per cent in 6 to 10 years, 4 per cent in 16 to 20 years and 4 per cent in 21 years or more. However, in group 2 the remaining 52 per cent of the respondents would return to India in 1 to 5 years if they do not get a job in the host country and 3 per cent in 6 to 10 years, 1 per cent in 16 to 20 years and 7 per cent in 21 years or more.

Figure C.18. If you get a job in the host country, would you still prefer to return to India?



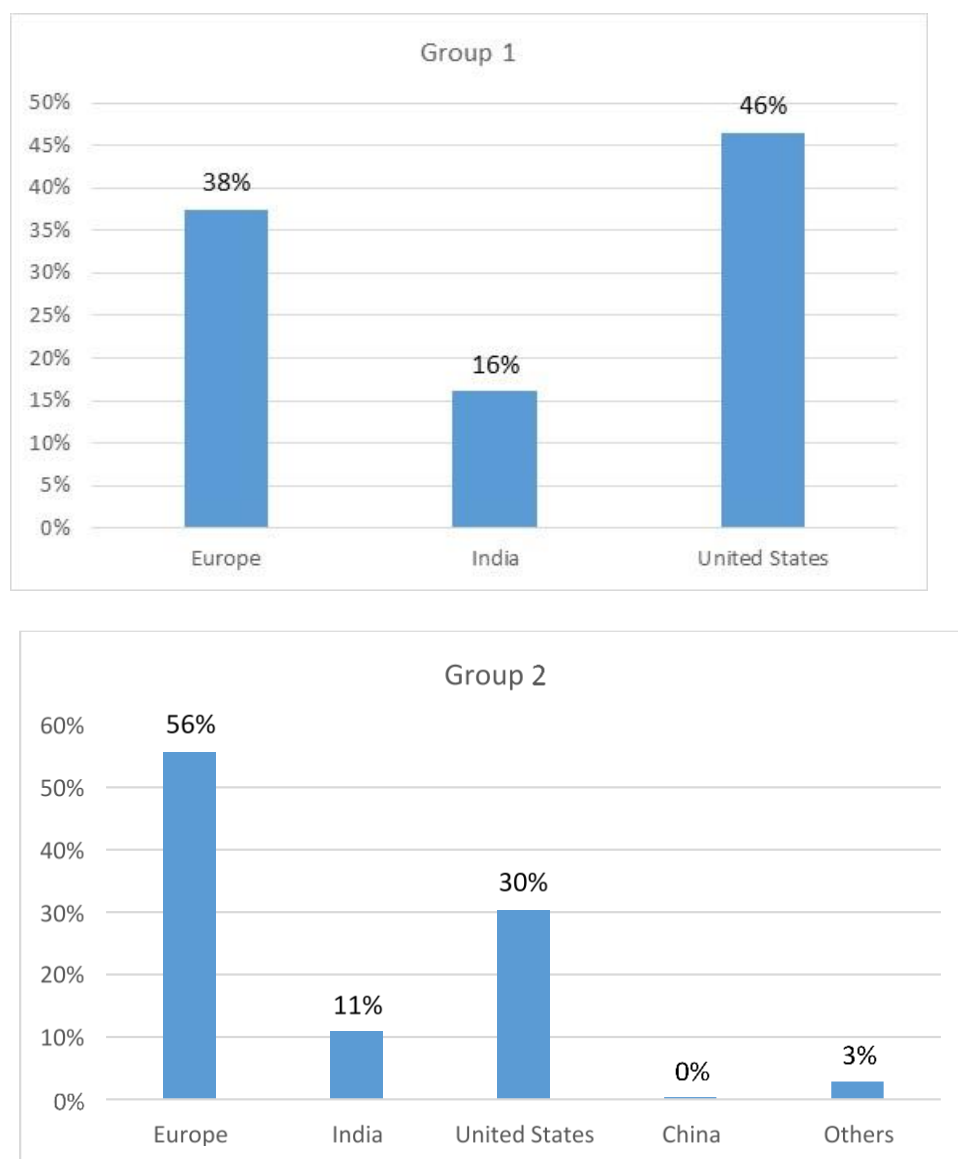
In group 1, 23 per cent of the respondents would still prefer to return to India even after getting a job in the host country, 43 per cent would not and 34 per cent were undecided. In group 2, 32 per cent of the respondents would still prefer to return to India even after getting a job in the host country, 44 per cent would not and 24 per cent were undecided.

Figure C.19. Based on your educational qualifications/area of specialization, if you get a job in India, would you return to India?



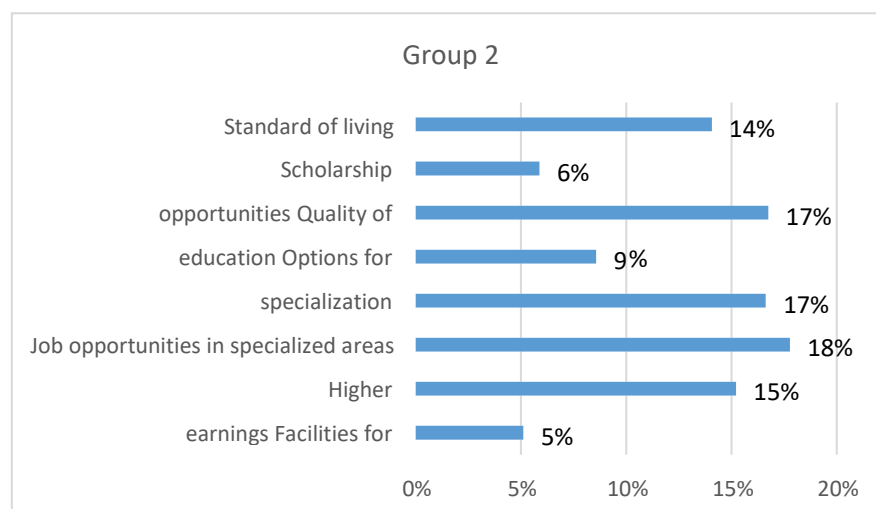
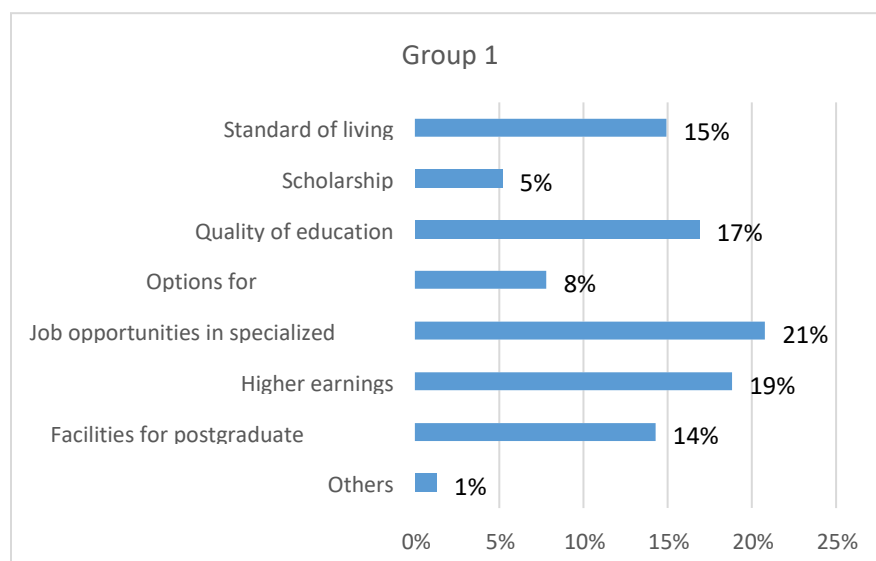
57 per cent respondents in group 1 would return to India after completing their studies if they would find a job in India based on their educational qualifications or area of specialization, 9 per cent would not and 34 per cent were undecided. In group 2, 52 per cent of the respondents would return to India studies if they would find a job in India based on their educational qualifications or area of specialization, 23 per cent would not and 25 per cent were undecided.

Figure C.20. Based on your educational qualifications/area of specialization, where do you see better job opportunities?



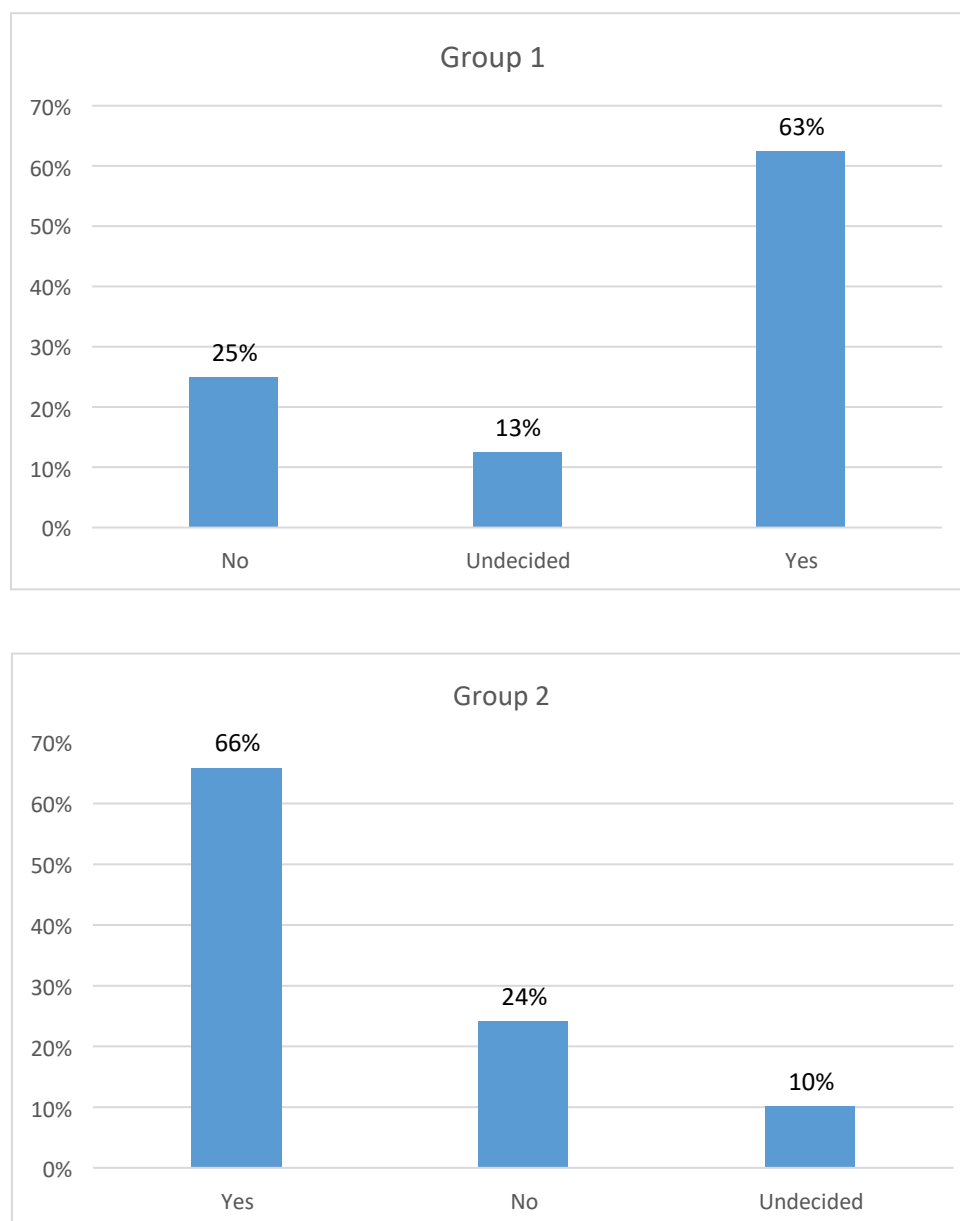
38 per cent of respondents in group 1 feel there are better job opportunities in Europe based on their educational qualifications or area of specialization, 46 per cent feel better job opportunities are in the United States followed by 18 per cent who feel India has better job opportunities. In group 2, 56 per cent respondents feel there are better job opportunities in Europe based on their educational qualifications or area of specialization, 11 per cent feel India has better job opportunities, followed by 30 per cent respondents who feel the United States has better job opportunities. 3 per cent feel other places have better job opportunities.

Figure C.21. According to your opinion, from the following, what does India lack that could be the main reasons for emigration of Indian students?



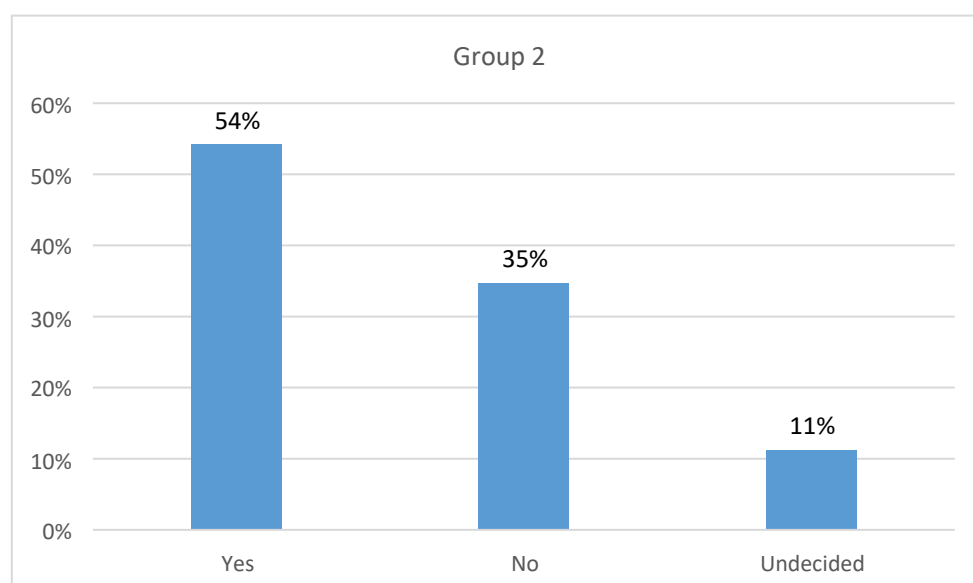
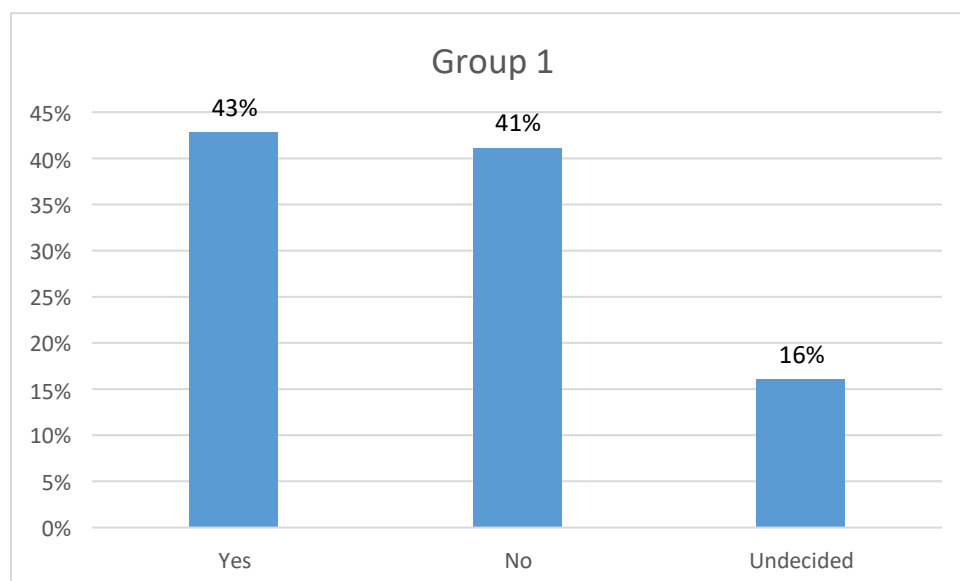
According to respondents in both group 1 and 2, the three main factors that could be the reasons for emigration of Indian students to foreign countries are lack of job opportunities in specialised areas, possibilities of higher earnings and quality of education provided by foreign universities. Also, many respondents believe that facilities for postgraduate research provided by foreign universities and institutions are better than those in India and this could also be an important cause of emigration of Indian students.

Figure C.22. If all Indian educational degrees were internationally recognized, would you still want to study abroad?



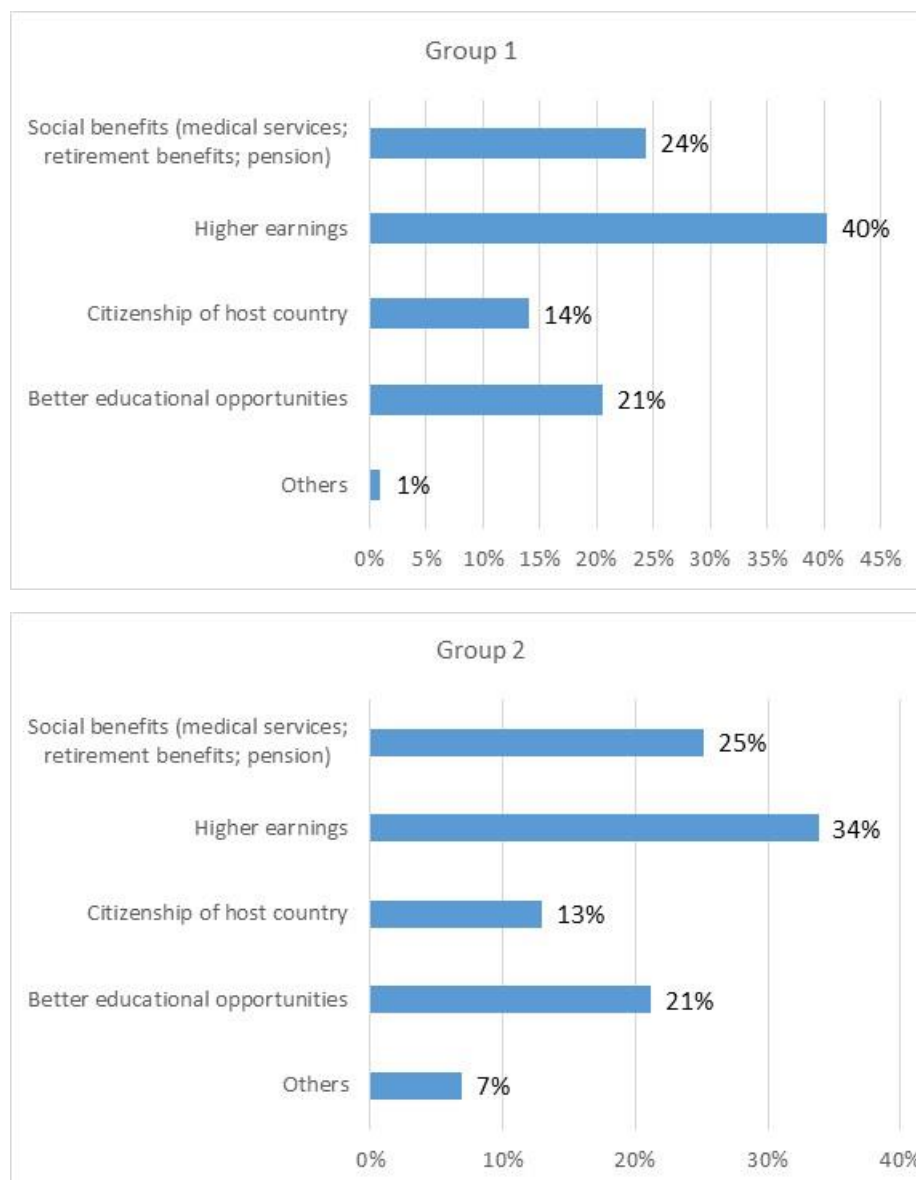
63 per cent of respondents in group 1 would still want to study abroad even if all Indian degrees were internationally recognized, 25 per cent do not and 13 per cent are undecided. However, 66 per cent of respondents in group 2 would still want to study abroad even if all Indian degrees were internationally recognized, 24 per cent do not and 10 per cent are undecided.

Figure C.23. If quality of education in India was at par with international universities, would you still want to study abroad?



41 per cent respondents in group 1 would not want to study abroad if quality of education in India was at par with international universities, 43 per cent would still prefer to study abroad and 16 per cent are undecided. In group 2, 35 per cent of the respondents would not want to study abroad if quality of education in India was at par with international universities, 54 per cent would still prefer and 11 per cent are undecided.

Figure C.24. From the following which factors according to you would be influential in choosing to permanently settle in the host country?



In group 1, 40 per cent of the respondents answered higher earnings as the most influential factor for them to stay back in the host country as compared to 34 per cent of the respondents in group 2. The difference of opinion was not much between group 1 and group 2 for choosing social benefits as another important factor, 24 per cent and 25 per cent respondents chose this option respectively. 21 per cent of the respondents in both groups chose better educational opportunities as another important factor.

List of Tables:

Source: UNESCO Institute of Statistics - Global Flow of Tertiary-level students

Table 3.1. Indian student Migration to Non-EU countries (2015)

Country	Inflow of no. of Indian students
United States	92.597
Australia	16.15
Canada	9.582
United Arab Emirates	9.273
New Zealand	6.845
Ukraine	3.587
Saudi Arabia	1.817
Kyrgyzstan	1.137
Malaysia	1.126
Georgia	911
Armenia	647
Oman	646
Korea, Rep.	585
Mauritius	546
Japan	535
Qatar	501
Kazakhstan	392
Thailand	375
Turkey	337
South Africa	323
China, Hong Kong	243
Bahrain	231
Saint Lucia	170
Tajikistan	128
Egypt	126

Table 3.2. Indian student migration to EU member states (2015)

EU member state	Inflow of No. of Indian students
United Kingdom	22.155
Germany	5.645
France	1.828
Sweden	1.069
Italy	999
Netherlands	805
Finland	636
Ireland	536
Austria	348
Cyprus	320
Spain	299
Denmark	266
Belgium	241
Poland	223
Czech Republic	179
Romania	136
Latvia	94
Hungary	83
Portugal	65
Bulgaria	61
Lithuania	48
Luxembourg	26
Estonia	19

Slovenia	12
Greece	11
Slovakia	5
Croatia	< 5
Malta	< 5

Table 3.3 Indian student migration to EU Schengen countries (2015)

EU Schengen Area	Inflow of no. of Indian students
Norway	239
Switzerland	43
Iceland	18
Liechtenstein	<5

Table 3.4. Indian student migration to Non-EU countries (2016)

Country	Inflow of no. of Indian students
United States	112714
Australia	46316
New Zealand	15017
United Arab Emirates	13370
Russian Federation	5250
Ukraine	4773

Kyrgyzstan	3917
Malaysia	2204
Saudi Arabia	2063
Georgia	1435
Oman	915
Korea, Rep.	745
Japan	577
Tajikistan	573
Qatar	522
Mauritius	503
China, Hong Kong	384
South Africa	355
Bahrain	349
Iran, Islamic Rep.	98
Grenada	97
Israel	88
Botswana	66
Republic of Moldova	37
Brazil	29
Brunei Darussalam	21
Sri Lanka	21
Namibia	16
Azerbaijan	11
Ghana	11
Jordan	9
Chile	5

Table 3.5. Indian student migration to EU member states (2016)

EU member state	Inflow of No. of Indian students
United Kingdom	18.177
Germany	9.896
France	2.391
Italy	1.45
Sweden	1.354
Netherlands	1.268
Ireland	1.128
Poland	914
Finland	728
Spain	432
Austria	372
Lithuania	338
Belgium	331
Denmark	289
Cyprus	271
Czech Republic	243
Portugal	195
Hungary	194
Latvia	164
Romania	111
Estonia	92
Bulgaria	70

Luxembourg	33
Slovenia	19
Slovakia	17
Malta	7
Croatia	<5
Greece	NA

Table 3.6. Indian student migration to EU Schengen countries (2016)

EU Schengen Area	Inflow of no. of Indian students
Switzerland	716
Norway	349
Iceland	14
Liechtenstein	<5



