

Department of Education, University of Oxford



Dissertation

**Transnational Education and Regional Development: A case study of
Namal College, Mianwali, Pakistan**

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Word Count: 19, 195

Dissertation submitted in part-fulfilment of the requirements for the degree of MSc in Education (Higher Education) at the Department of Education, University of Oxford.

August 2018

Acknowledgements

I would like to start by thanking God, the Almighty, for giving me the gift of knowledge.

This journey would not have been easy without the financial and moral support of my beloved parents and siblings. Thank you for encouraging me during my lows and keeping me grounded during my highs. I would like to thank my classmates and my collegemates for the help, the laughs and for simply being the most amazing group of people I have ever met.

I am deeply indebted to my supervisor, Dr. Helen Carasso, for her continuous guidance and encouragement. My college, St. Stephen's House, provided me with a travel grant that covered a major portion of the cost of my research in Pakistan for which I am grateful.

Last but not the least, I would like to express my gratitude to all the participants from Namal College for taking time out of their busy schedules to participate in this research, and for being so hospitable. I wish Namal all the best in its future ventures.

List of Abbreviations

HE	Higher Education
HEC	The Higher Education Commission of Pakistan
HEI	Higher Education Institution
QAA	Quality Assurance Agency of the UK
TNE	Transnational Education

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Abstract

Transnational education is proliferating in developing countries as TNEs are used strategically to raise the quantity and quality of local higher education provision to absorb the increasing local demand for higher education and prepare the country for a knowledge-based economy. However, there is a critical paucity in the literature discussing the substantial rise of TNE in developing countries and its impact on the regional development. This is a qualitative case study that intends to explore the impact of TNE, i.e. Namal College, on the regional development in Pakistan. Stakeholders' perspective on the role of the TNE is considered, and barriers of the TNE to regional development are explored as well. The data was collected using semi-structured interviews and documentary analysis. A total of 17 participants were selected for the interviews; 10 final year undergraduate students, and 5 academic and administrative staff members of Namal College were selected using purposive sampling, while 2 employers were selected using convenience sampling. The findings indicate that the TNE has broad social and economic impact on the regional development. It has played a crucial role in demand absorption, enhanced the capacity and quality of local higher education institution rapidly through ready-made resources and good pedagogical practices, while offering students from underprivileged background an option to study international degree from home. However, the TNE does not assist students in securing jobs. In addition, the curriculum brought by the TNE is less responsive to the local needs, thus limiting the impact in terms of knowledge transfer for regional development. Moreover, high franchise fee associated with the TNE may also hinder institutional expansion projects by causing financial constraints on the host institution.

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1. Introduction

1.1. Setting the Scene

Transnational education (TNE), referred to programs delivered across national boundaries, has proliferated as a result of the rapidly increasing demand for higher education across the world (Lien & Wang, 2010). Bohm, Davis, Meares, and Pearce (2002) estimate that the number of international students will increase from 1.8 million in 2000 to 7.2 million in 2020, with an estimated 44 per cent enrolled in TNE. At the same time, the higher education sector has been given increasing responsibility to contribute to the regional development (Peer & Penker, 2016). Thus, in the past two decades, transnational higher education linkages between developed countries and developing countries have increased (Altbach & Knight, 2007). Governments and other stakeholders have started to appreciate the transformative power of universities in the global South. Research has suggested a strong association between higher education participation rates and levels of development. Cloete and colleagues affirm that higher education is now recognized as the key to delivering the knowledge required for development; tertiary education is essential for the design and production of modern technologies, for a country's innovative capacity, and for the development of civil society (Cloete, Bailey & Maassen, 2011).

The Higher Education Commission (HEC) of Pakistan is trying to raise the domestic higher education provision to international standards (British Council Pakistan, 2018). Over 40 per cent of the higher education providers are from the private sector (NEMIS, 2017), and an increasing number of foreign providers have also started to operate in the country mainly through the collaborative mode of delivering programmes with local institutions (Syed, 2017). For the academic year 2015-16, the number of students studying for a UK degree in Pakistan has reached 46, 640, indicating an increase of approximately 10 per cent from the previous year and about 33 per cent over the past five years, making Pakistan the fourth largest host country for UK TNE, after Singapore, China and Malaysia (QAA, 2017). Established universities predominantly from Western developed countries open campuses through franchising, joint ventures, or sole ventures (Altbach & Knight, 2007). This move to transnational education allow Higher Education Institutions (HEIs) to service students who are

unable or not inclined to travel and study abroad (Belarbi, El-Refae, Ballard, & Abu-Rashed, 2016). TNE offers students, especially from the developing countries who may not be able to afford to go overseas, a platform to acquire internationally recognized degrees at their doorstep (Welch, 2011). Transnational education can help to reduce brain drain, pressure on local higher education system, and raise the level of human capital (Altbach, 2007).

However, numerous uncertainties exist about both the realities and the future of transnational education. The OECD (2004) states that TNE providers, for instance from the UK and Australia, are concerned with demand absorption as well as profit generation. Slaughter and Leslie (1997) caution that, although TNE plays a vital role in absorbing excess demand for higher education, it may quickly degenerate into, “a market to attract international students for financial benefits” (p. 36). Thus, the transformation towards market-oriented provision of higher education (Naidoo, 2003) can put HE sectors of developing countries into a new terrain of potential threats, including concerns about the erosion of educational sovereignty; westernization of the local culture and languages (Altbach, 2007); and regulatory framework to ensure quality and relevance (Lee, 2004), for example the emergence of pseudo-universities (Altbach, 2001) and rogue for-profit institutions (Garett, 2005).

In Pakistan, there is a critical paucity in the literature discussing the substantial rise of TNE. The concept of attracting foreign education providers to support the domestic higher education and training needs may have positive consequences in terms of curbing brain drain or even stimulating brain gain, but the impact on the regional development are yet unclear. Could the rapid increase of transnational universities in developing countries contribute to the governments’ mission of enhancing the quality of higher education, uplift rural youth and contribute to the regional development?

1.2. The Rationale

There are multiple studies that have investigated transnational education and the role of universities on regional development separately from difference perspectives. For example, the motivational factors in students’ decision to study in branch campuses (Ahmed & Buchanan, 2017; Ahmad, 2014); teaching and learning standards in TNEs (Lim et al., 2016;

Belarbi et al., 2016); and role of universities on regional development (Steenhuis & Gray, 2006; Chatterton & Goddard, 2000). However, the research on the impact of TNEs in their local regions, especially in the developing countries given that TNEs are predominantly established there, is largely absent. Thus, this is an exploratory study that intends to investigate the impact of TNE on regional development. For the purpose of this study, Namal College, has been identified as the subject of this case study because it is the only TNE that is established in rural Pakistan, in the Mianwali district of Punjab, while all the other HEC recognized TNEs in Pakistan are established in urban areas; the three major cities of Pakistan, namely Islamabad, Lahore and Karachi.

1.3. The Research Questions

The dissertation attempts to explore the following research questions:

1. What is the impact of TNE, i.e. Namal College, on the regional development?
2. What is the stakeholders', i.e. students' and academics', perspective on the role of TNE?
3. What are the barriers of TNE to regional development?

1.4. Dissertation Outline

The research is presented in six separate chapters. Chapter 2 looks at the literature on transnational education around the world and in Pakistan, and the literature on universities' impact on regional development. Chapter 3 discusses the research methodology by giving a detailed overview of and justifications for the selected research design and data collection methods. Ethical considerations undertaken while conducting the study are also highlighted. Chapter 4 presents the findings from the data collection and analysis procedure. Chapter 5 conducts discussion on the findings ensued from the data. Finally, chapter 6 concludes the study with some recommendations. The limitations of the study are highlighted, and avenues for future research are also listed in the final chapter.

2. Literature Review

Chapter Summary

Chapter 2 is divided into three sections. The first section looks at the literature on transnational education around the world, and the second section brings the focus to TNE activities in Pakistan. The last section looks at the literature on universities' role on regional development. The first section starts by defining the transnational education phenomenon, and the section continues with a discussion on its driving forces, new trends and directions in the field, and ends by highlighting potential threats that may hinder this phenomenon. The second section starts with an overview of the higher education evolution in Pakistan, and then briefly highlights the key issues in the HE sector, and finally, TNE landscape in Pakistan is discussed. The third section starts with a general discussion on the impact of higher education on individuals and the society. Then, impact of higher education on regional economic development is discussed, introducing the triple helix model. Finally, some conditions are listed that enable universities to stimulate regional economic development.

2.1. Transnational Education

2.1.1. Definition

Internationalization of higher education has become a global phenomenon that serves as a key strategy for developing higher education according to the international educational, economic, social, and cultural developments, however due to the diversity in the nature of internationalization in different universities (Maringe & Gibbs, 2009), there is a lack of consensus about the meaning of the term 'internationalization' (Knight, 2003b). Nevertheless, a widely used definition of internationalization is offered by Knight and de Wit (1995, as cited in Maringe & Gibbs, 2009), which is: 'the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution' (p. 83). In other words, it is a process that aims to transform the tripartite mission of the university, as a place for teaching, research and service to society, from being locally focused to becoming globally oriented (Maringe & Gibbs, 2009).

Globalization, described as the process and state of interdependence between states resulting in the increased movement of goods, services, people and ideas around the world, is often associated with the emergence of the idea of internationalization in higher education (UNESCO, 1998 as cited in Maringe & Gibbs, 2009). Altbach and Knight (2007) explain the distinction between globalization and internationalization in the following words: “globalization as the economic, political, and societal forces pushing 21st century higher education toward greater international involvement” (p. 290), for instance, the use of English as the lingua franca for scientific communication, advancement in information technology (IT), the growing integration of research, and the growing international labour market for scientists and scholars (Altbach, 2007).

Maringe and Gibbs (2009) state that there are two broad perspectives associated with the notion of internationalization of higher education: one, it is a process that responds to the forces of globalization; and two, it is a deliberate strategy to raise the quality and status of higher education to a rapidly mobile higher education student market. There are a variety of concepts in higher education with the focus on internationalization, for example transnational education, cross-border education, and borderless education. These international initiatives in higher education vary in institutions, for instance, traditional study abroad programs that aim at providing cross-cultural understandings; branch campuses; independent institutions based on foreign academic models; franchised foreign academic programs emphasizing on the international perspectives and skills of students; or enhancing foreign language programs (UK Higher Education International & British Council, 2016, p. 10).

The focus of this research is on transnational education (TNE), which the UNESCO/ Council of Europe (2001) defined as follows: “all types of higher education study programmes, or sets of courses of study, or educational services (including those of distance education) in which the learners are located in a country different from the one where the awarding institution is based”. TNE constitutes an important component of the internationalisation of higher education (Huang, 2007). There are several forms that TNE can take including, franchising; joint venture (i.e. twinning programs); branch campuses;

off-shore institutions (i.e. autonomous institutions with no ‘mother country’); large corporations; and virtual universities (Vignoli, 2004). The transnational institute discussed in this paper, Namal College, is a branch campus of the University of Bradford. Branch campuses are a type of TNE that receive identical instructions from the parent institution (Altbach, 2010), and irrespective of whether the course was taken at an international branch campus or home country, the degree certificate is awarded from the home university (Wilkins, Balakrishnan & Huisman, 2012).

2.1.2. Drivers of Internationalization of HEIs

There are several key advantages associated with internationalization of higher education, including providing quality educational experiences, restructuring the higher education systems and services, providing a ready environment for staff to learn cooperatively and to gain international academic experience essential for their career advancement, enhancing the reputation of the university in key educational markets as a global player, enhancing inter-country cooperation (Maringe & Gibbs, 2009). The section below discusses several rationales for academic internationalization worldwide:

2.1.2.1. Access Provision and Demand Absorption

The largest programs in the market of international higher education is called “demand absorbing” (Altbach, 2007, p.119), which refers to providing access to students who would otherwise not be able to receive tertiary education due to the lack of domestic capacity to meet the local growing demand for higher education (Altbach, 2007). There has been a significant growth of student enrolment at higher education from 28 million in 1980 to 47 million by 1995 in developing countries (Task Force on Higher Education and Society, 2000, p. 27). The demand for higher education in developing countries will continue to expand rapidly as most of them, including Pakistan, educate relatively small proportions of their young population at the postsecondary level (Altbach, 2007). In 2005, almost 60 percent of the population in Pakistan, i.e. around 90 million people, was less than 25 years old (Amjad, 2013). This increases the demand for access to higher education immensely. Currently, Pakistan’s potential higher education population has reached

84 million, however only 1.4 million have access to higher education. In addition, based on economic need, there is a shortfall of an estimated 30,000 PhDs (Hiles, 2016).

It must also be noted that, generally, demand-absorbing programs are from the less prestigious end of the higher education system, although there are some international initiatives from prestigious HEIs from Europe and America setting up branch campuses in countries like Singapore and Qatar, and the key motivation for the foreign provider to establish a branch campus in another country is to generate profit (Belarbi et al., 2016). This is done with foreign providers cooperating with local providers, academic institutions in the public or private sectors, or they simply establish their own branch campuses. The tuition fees generated have become an important source to compensate for insufficient resources resulted from domestic financial cuts in the West (Syed, 2017). As a result, TNE is not only a new form of international collaboration in education, but also a source of income for many universities around the world, especially in the Western developed countries (OECD, 2004).

2.1.2.2. Academic Rationale

Universities are on the frontline in creating knowledge-based societies (Slaughter & Leslie, 1997). The emergence of the knowledge-based society has resulted in the rise of the service sector in which societies are dependent on knowledge products and highly educated personnel for economic growth (Castells, 2000). Knowledge is generated through research in higher education institutions and disseminated through teaching (Maringe & Gibbs, 2009). In this interdependent global economy, it is essential that universities have dynamic and adaptive curricula rather than a monolithic national perspective to prepare students for success in the global marketplace (Belarbi et al., 2016). Internationalizing the university curriculum should involve a significant redesign of course units and programmes, including the content, but more importantly the teaching strategies and resources to reflect a more

global perspective of university learning and to become more all-encompassing and truly international (Maringe & Gibbs, 2009).

2.1.2.3. Economic Rationale

Research has repeatedly shown that a country's economic competitiveness is directly related to the quality of its higher education system. Findings from a study of the impact of universities on regional economies (Bekhradnia, 2007) suggest that universities with the strongest international activity have the highest number of research active staff that attract highest research grant, the highest industrial research contract income, the highest PhD awards, and the most published research papers.

2.1.2.4. Political Rationale

Higher education is seen as a diplomatic investment in future political and economic relations. Since the colonial period, higher education, specifically, has been the key modernizing influencer and an integral part of the West's foreign policy agenda in seeking to expand their spheres of influence around the world (Maringe & Gibbs, 2009). One may argue that with the independence of former colonies, this political dimension of international education has been reduced in importance. However, the former president of Zimbabwe, Mugabe, avers that the colonial political domination continues in a subtler form, for instance, the Commonwealth is often seen as a strategy for perpetuating Western values and maintaining colonial heritage among former colonies (White, 2003). Even the non-colonized Asian countries, i.e. Japan, Thailand, and China, established Western-style HEIs to assist in the process of modernization and industrialization rather than relying on indigenous academic traditions (Altbach, 2007), thus further reinforcing the belief that the Western model of higher education is superior.

2.1.3. New Trends and Directions

2.1.3.1. From North-to-South to South-to-South

As of 2011, the number of international branch campuses in the world have increased to 183 (Lane, 2011). Altbach (2007) points out the inequality in the

expansion of international higher education as it is evidently dominated by the United States; 48 percent of all current international branch campuses have been set up by the US HEIs. The second in line is Australia (i.e. 14 campuses), followed by the United Kingdom (i.e. 13 campuses) (Becker, 2010; Maringe & Gibbs, 2009; Lim et al., 2016). Ownership of knowledge, information technology infrastructure, and other knowledge products is almost exclusively in the hands of Northern institutions; hence knowledge transfer is largely from the North to the South (Altbach, 2007). However, both Altbach (2007) and Becker (2010) have noticed an increase of South-to-South provision of higher education, which indicates that developing countries are gradually establishing the branch campuses of their HEIs abroad, although North-to-South branch-campus development is evidently dominating. The substantial increase in South-to-South provision, especially in Asia and Africa, is largely due to the improved quality of domestic higher education programs in developing countries, coupled with their increased ambition to export programs to generate profit from these ventures (Becker, 2010; Knight, 2011). Recently, Hong Kong and Singapore have started to export educational programs (Hoare, 2012). Moreover, the relevance and need for programs in countries with similar socioeconomic contexts and directions of development have also contributed to this growth, for instance, the Aga Khan University of Pakistan opened a branch campus in East Africa specializing in medical sciences (Altbach, 2007). Mauritius is another country where South-to-South collaboration on education is taking place as it tries to establish itself as a “cyber-island” by attracting foreign IT firms from India and also the West (Altbach, 2007).

2.1.3.2. Sponsors

The United Arab Emirates is the clear leader amongst the host countries; hosting a quarter of all international branch campuses (i.e. a total of 40). Two-thirds of these branch campuses are located in the Dubai International Academic City (Becker, 2010). The driving force behind the Middle East countries, especially the Arab states of the Gulf, such as UAE and Qatar, are high student demand and the States’ need to transform from oil-exporting industries to knowledge-based economies (Knight,

2011). China is in the second position with 15 campuses, followed by Singapore (i.e. 12 campuses) and Qatar (i.e. 9 campuses) (Becker, 2010). The government of the latter two states are actively trying to establish themselves as international higher education hubs in their respective regions (Knight, 2011). Recently, even Malaysian government has declared its desire to become a regional higher education hub as it considers to include the development of international branch campuses in their long-term education and economic development strategy (Kinser & Lane, 2010; Verbik & Lasanowski, 2007).

Consequently, branch campus initiatives are increasingly being invited and even financially supported by governments or other organizations in host countries (Becker, 2010). Countries that provide financial support or infrastructure to foreign providers have attracted the highest number of international branch campuses. The United Arab Emirates has been able to attract more campuses than any other country by utilizing its oil wealth to set up useful funding and support packages for foreign institutions that establish a local campus, for instance the Dubai International Academic City, offers foreign campuses a 100 percent of foreign ownership, repatriation of profits, and tax exemption (Becker, 2010).

2.1.4. Threats to Internationalization of HEIs

A variety of uncertainties are identified in the literature that may affect internationalization even though the phenomenon of internationalization of higher education seem to be growing strong and stable. National security and political realities, expansion of domestic capacity (Altbach, 2007), expansion of e-learning, and quality assurance and control (Verbik & Merkley, 2006) are some potential threats to the internationalization efforts of universities.

2.1.4.1. Political Realities and National Security

Potential foreign providers may avoid collaborating with the higher education sector of countries with political instability and increasing occurrences of terrorism. Pakistan has appeared in the news repeatedly for terrorist activities and one such

incident that shook the world was the APS Peshawar massacre that took place on 16th December in 2014 as a result of which educational institutions were tagged as ‘Red Zones’ and most institutions were shut down for safety reasons (BBC, 2014).

2.1.4.2. Expansion of Domestic Capacity

International branch campuses typically offer a limited curriculum, generally in fields that attract large enrolments but require limited infrastructure, and are relatively inexpensive to teach, such as business management and information technology (Lien & Wang, 2010). As a result, interest to enrol in such programs may decrease once the country expands local access to higher education (Altbach, 2007). Reasons for the decline of branch campuses may also be due to the fact that these campuses seldom reflect the home university in terms of facilities or the breadth of curriculum. As governments, accreditors, host university, and students become savvier about their educational goals, they may demand higher quality in the branch campuses, and failing to meet the demand may result in closure (Altbach, 2010), an example is the closure of John Hopkins medical program in Singapore (Overland, 2006).

2.1.4.3. Expansion of e-Learning

The expansion of e-learning facilities may develop to an extent where students may find it unnecessary to travel to seek higher education (Maringe & Gibbs, 2009). Moreover, it is not clear if domestic e-learning degrees will continue to dominate or international e-learning programs will become more widespread. Nonetheless, it is worth noting that most of the largest distance-learning universities are located in developing or middle-income countries (Altbach, 2007), for instance, Indira Gandhi National Open University of India.

2.1.4.4. Quality Assurance and Control

International education programs have been criticized for low standards as it is unclear how quality can be measured in transnational higher education programs when quality assurance is an existing concern even within countries (Altbach, 2007).

Many countries still do not have a regulatory system to register or evaluate foreign providers (Verbik & Merkley, 2006).

2.2. Higher Education Evolution in Pakistan

2.2.1. Overview of the Higher Education in Pakistan

Pakistan, officially known as the Islamic Republic of Pakistan, appeared on the world map in 1947 on 14th August¹. Pakistan inherited a very weak base of tertiary education at the time of independence; one university, the University of Punjab (established in Lahore in 1882), out of the twenty-one universities established in British India (Isani & Virk, 2010). Hence, all universities, except the University of the Punjab, are the product of the post-independence period.

Isani and Virk (2010) explain that historically the concept of a secular university imparting liberal and technological education was foreign to the indigenous sub-continental tradition and was only introduced during the second half of the nineteenth century by the British empire. Prior to this, education was imbedded in religious institutions, for instance, Muslim educational institutions, known as Maktabas and Madrasas, specialized in the study of the Quran, Hadith, jurisprudence, astrology and medicine. These institutions were either individually initiated or supported by the community. Education was not regarded as a responsibility of the State until 1857 when the British established three universities in the sub-continent, in Calcutta, Bombay, and Madras (Isani & Virk, 2010).

The initial pace of the development of higher education in Pakistan was slow. In 1947–1948, Pakistan only had two universities (Nazir, 2010). During the first decade after independence, the number of degree awarding institutions remained restricted to four. The next decade saw the growth of six more universities and the decade following saw an increase of 18 universities (Isani & Virk, 2003). In the period of 1978 to 1987, the number

¹ As the United Kingdom agreed to the partitioning of India in 1947, the modern state of Pakistan was established, amalgamating the Muslim-majority eastern and northwestern regions of British India. It comprised the provinces of Balochistan, the North-West Frontier Province, West Punjab, and Sindh, which made West Pakistan, and the province of East Bengal, was named East Pakistan, which gained independence as Bangladesh in 1971.

rose to 26, and increased to 43 between 1988 – 1997 (Isani & Virk, 2010). There were no private degree awarding institutions for almost 4 decades; the first private universities were the Aga Khan University, Karachi (1983), and the Lahore University of Management Sciences, Lahore (1985). From 1998 to 2007, a record number of 83 universities/ degree awarding institutions have been established (Isani & Virk, 2010). There was an exponential expansion of higher education during the late nineties, and further expansion is expected in the coming years, especially with the expansion of the private sector. According to Pakistan Education Statistics 2015 – 2016 (NEMIS, 2017), a total of 163 universities have been recorded, 91 universities or 56 per cent belong to the public sector, whereas 72 or 44 per cent are established by the private sector. In addition to the HEC recognized universities and degree-awarding institutes, there are a large number of affiliated colleges² and institutes that offer higher education qualifications on behalf of affiliated universities or degree-awarding institutes throughout the country (QAA, 2017). However, despite the exponential rise in the number of universities in the recent decade, the major part of the education system, 49 per cent, is shared by primary schools, and the 163 universities make up to 0.05 per cent of the education system of Pakistan (Government of Pakistan, 2017; NEMIS, 2017). While the higher education participation rates in many developed countries are well over 50 per cent (Koehn, 2012), only 2.6 percent of university-age students were attending higher education and a mere 23 percent of university faculty had PhDs in Pakistan in 2001 (Hayward, 2009).

2.2.2. Key Issues in the Higher Education sector of Pakistan

The deteriorating standards of higher education in the developing countries, especially Pakistan, is due to the past neglect and poor educational policies (Isani & Virk, 2003). The education sector has been allocated the lowest budget since the establishment of Pakistan which has deteriorated the quality of the education system. According to International Crisis group (as cited in Ahmad, Rehman, Ali, Khan, & Khan, 2014), Pakistan is amongst

² The University of the Punjab, established in 1882, is the oldest and largest university in Pakistan, comprising five campuses; 13 faculties; 10 constituent colleges; over 73 departments, centres and institutes; and 614 affiliated colleges (QAA, 2017).

the 12 countries in the world that spends less than 2 percent of their GDP on the education sector.

The World Bank report on Higher Education and Scientific Research for Development in Pakistan (1990, as cited in Jahangir, 2008) examined the higher education system of Pakistan at the invitation of the Government of Pakistan. The key issues in the higher education sector of Pakistan identified in the Report were: (i) flawed institutional framework, (ii) inefficiency and ineffectiveness, (iii) problematic nature of design and delivery of services, (iv) irrelevance, and (v) low productivity in research. According to Isani and Virk (2010), the problems identified by the report were acknowledged, however, the analytical report was brushed off with the excuse that the recommendations are “too ambitious and drastic” (Isani & Virk, 2010, p. 124); requiring strong commitment from politicians and massive funding, which the Government was not willing to support.

Later, the Task Force on Higher Education and Society (2000) was convened by the World Bank and UNESCO, bringing together experts from 13 countries, to explore the future of higher education in the developing world, comprised of over 80 per cent of the world’s population. The Report attempted to diagnose common issues of higher education in the developing world and provided broad based solutions. However, Isani and Virk (2003) criticized the Report for outlining a common recipe; offering solution and general principles for reforming complex higher education issues of the developing world. Nonetheless, they agree with the conclusion drawn up by the Task Force that, “without more and better higher education, developing countries will find it increasingly difficult to benefit from the global knowledge-based economy” (Task Force on Higher Education and Society, 2000, p.9).

In 2000, President Pervez Musharraf asked the Ministry of Education to develop a plan for the higher education sector of Pakistan as a result of which Pakistani Task Force on Higher Education was set up in 2001 (Hayward, 2009). The Task Force considered the following areas to improve the higher education in Pakistan: widening access; improving the quality of higher education; differentiation and diversification; quality of students and

faculty; infrastructure; funding; university governance; role of the private sector; and curriculum development, especially in science and technology, and general education (Isani & Virk, 2003). These deliberations also led to the establishment of the Higher Education Commission (HEC) of Pakistan in 2002. It was essentially after the creation of HEC that some concrete steps were taken to address issues in the higher education sector of Pakistan. HEC initiated a major reform by creating the Medium-term Development Framework: 2005–10 that focused on quality improvement, increased access, and faculty development (Hayward, 2009). For instance, HEC introduced major upgrade of laboratories; quality assurance and accreditation process was established (i.e. QAA - HEC³); student enrolment rate increased 89 percent since 2001; a tenure-track system was introduced with salaries two to three times higher than existing civil-service levels for those who demonstrate excellence in teaching and research (Hayward, 2009). However, a recent evaluation of the HEC's Medium-term Development Framework reveals that there is still a mismatch between the research needs of the country and the research being undertaken at universities (QAA, 2017). Moreover, the proportion of the university-aged group attending universities remains well under international standards, at 3.9 per cent, (Hayward, 2009) of which 72 per cent of the students are enrolled in bachelor's degrees, 26 per cent in master's programs, and only 2 per cent are enrolled at doctoral level (QAA, 2017).

2.2.3. TNE landscape in Pakistan

In the recent two decades, there has been a rise in international cooperation amongst universities (Altbach & Knight, 2007). This trend has also been observed in the higher education sector of Pakistan. According to the British Council Pakistan (2018), the HEC wants to play a pivotal role in providing information to foreign institutes interested in investment and setting up collaborations, including an overview of the university

³ The HEC, soon after its establishment, set up a Quality Assurance Committee (QAC) to function as an advisory body, comprised of Vice-Chancellors of public and private sector universities, and representatives of the HEC. Upon recommendation from the QAC, an independent Quality Assurance Agency was established in 2005 as a specialised policy-making and monitoring body operating under the HEC umbrella (i.e. QAA-HEC). The QAA-HEC is responsible for safeguarding and enhancing the quality of local HEIs (QAA, 2017).

landscape and possible partners. The HEC wants to enable partnerships with institutions that lack networks as most existing partnerships stem from faculty-level connections or high-profile donors (British Council Pakistan, 2018).

According to the head of Transnational Education of Universities UK, Singapore, China, and Malaysia remain strong locations for UK HE TNE in the future, however the interest to work with the UK higher education institutions is developing in other countries too, for instance Pakistan (Hiles, 2016). Based on the QS World University Rankings 2016 – 2017, UK universities occupy “four of the top 10, nine of the top 50 and eighteen of the top 100 spots” (British Council Pakistan, 2018, par. 1). UK higher education institutions play a critical role in transferring knowledge and are connected to industry (Universities UK, 2015). Hence, developing countries, including Pakistan, look towards UK universities as a model to follow or to be inspired by.

It was at the behest of the HEC that the QAA conducted a comprehensive country survey on the TNE landscape in Pakistan, and assisted in developing reference points for quality assurance of foreign providers, with a view to facilitate growth of quality TNE in the country (QAA, 2017). According to the QAA Country Report (2017), there are currently only 9 HEC approved TNEs operating in Pakistan by collaborating with local partner institutes (see Table 1); “six are with UK universities, and the other three are with universities from Australia, Malaysia and the United States.” (QAA, 2017, p. 8). Syed (2017) considers the scope of TNE in Pakistan rather limited when compared to other developing countries. This view is also reflected by the HEC as it is actively setting up more collaborations and providing information to foreign providers. It has met with potential investors/universities on several occasions during 2016 and 2017. For instance, the British council (2018), in collaboration with the HEC of Pakistan organized a three-day UK-Pakistan Partners’ Event – Achieving Impact and Investment in Collaborative Research 2017 during which Phase 2 of Knowledge Exchange Partnerships was launched. This partnership is intended to promote international strategic transnational education partnerships between both the UK and Pakistan by establishing a network of higher education institutions between both countries for future projects around STEM, gender,

split side PhD, and education for emergencies and disability (British Council Pakistan, 2018). Besides the UK, the Embassy of France in Pakistan and the HEC co-organized the Pak-France Higher Education week from 13 to 18 March 2017 during which 20 French universities visited different cities of Pakistan for five days to explore new avenues for cooperation. Amongst the 20 participating universities were the Conference des Grandes Ecoles, Agreenium, Centrale Nantes, and ENSA Nantes (Embassy of France, 2017). Another joint venture is in the works between Pakistan and Austria called Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF-IAST). This collaboration will take place between the University of Haripur and several Austrian institutions with the objectives of creating a high quality technical education infrastructure and creating high technology industry (Tribune, 2018a).

Table 1.

HEC approved TNEs in Pakistan

HEC-approved collaborative partnerships with foreign degree-awarding bodies	
Management Development Institute (MDi) Pakistan, Islamabad	University of Southern Queensland, Australia
ACCA Pakistan Chapter, Lahore	Oxford Brookes University, UK
College of Accounting and Management Sciences, Karachi	University College Sedaya International, Malaysia
Roots College International (RCI), Islamabad	University of London, UK
Roots College International (RCI), Islamabad	BPP University, UK
Namal College, Mianwali	University of Bradford, UK
Ripah International University, Islamabad	The Northern Consortium UK (NCUK)
Nur International University, Lahore	University of Louisville, USA
The Millennium University College (TMUC), Islamabad	University of London, UK

Source: QAA, 2017

2.2.3.1. Namal College, Mianwali

Namal College, Mianwali, is selected as the TNE to conduct this research on as it is the first example of a TNE established in a rural region of Pakistan. Namal College, inaugurated in 2008, is a private tertiary institution that is associated with the University of Bradford. It is located in the impoverished Mianwali district of Punjab, Pakistan.

The vision and mission of Namal College is to provide international standard educational opportunity to the youth of rural areas, and to stimulate social change and economic development through the academic evolution of underdeveloped regions of Pakistan (Namal, n.d.-d). The founder and chairman of the board of governors of Namal College, Imran Khan⁴, depicts his vision and plan for the youth in rural areas in the following message: “If we make higher education available and affordable for our talented youth, it will lay the foundation for a vibrant and growing society enabling us to stand amongst the leading nations. Namal College Mianwali is exactly that kind of equal opportunity for the marginalized rural youth” (Khan, n.d.). Hence, Namal College as a TNE is established with a view to become a centre of academic excellence for rural uplift and of innovative solutions to rural challenges (QAA, 2017).

Namal College started with a humble beginning of offering technical education diplomas to the underprivileged youth residing in the district of Mianwali with the aim of making them employable for self-sustenance. However, it turned out to be just a prelude to a much broader social objective, which is to expand Namal College and transform the region into the largest Knowledge City of Pakistan (Namal, n.d.-c). Under the collaborative arrangement with the University of Bradford with Namal College, the University of Bradford retains control of all aspects of the programmes delivered in its name, including the design and the development of the curriculum, quality assurance, training and development for the faculty, student support matters and matters related to academic administration (Curtis, 2005). Currently, two four-year undergraduate degree programs; Bachelor of Science (Hons) in Computer Science and Bachelor of Engineering (Hons) in Electrical and Electronic Engineering are being offered under the franchise agreement (Namal, n.d.-a). Students of Namal College, Namalites as they identify themselves passionately, are

⁴ Imran Khan is a Pakistani politician, philanthropist, and a former cricketer. He is the current chairman of the Pakistan Tehreek-e-Insaf (PTI). He has become the Prime Minister of Pakistan (in waiting) after having won the 2018 general elections.

awarded with a University of Bradford degree. The 5th convocation celebration was held on 12th November 2017.

In terms of its long-term plan, according to the information provided on the Namal College website, the Namal Education Foundation (NEF) owns 1000 acres of land which will be used for building the Knowledge City in Pakistan. The construction for the second phase of Namal College has begun. A comprehensive plan of establishing six academic buildings, including School of Science and Engineering, School of Medicine, School of Business, School of Humanities, School of Agriculture, and Science & Technology Park; student hostels; faculty apartments; a central library; a mosque; an enterprise centre; and commercial areas, has been finalized (Namal, n.d.-c).

2.3. Universities and Regional Development

There is increasing expectation on HEIs to contribute to regional development (Chatterton & Goddard, 2000). Scientists define HEIs as significant ‘players’ in knowledge-based regional development (Thanki, 1999), or as “knowledge factories” (Uyarra, 2010, p. 1229). Thus, the government of Pakistan is turning towards TNE to enhance the national HE sector, which makes this research timely as it explores whether TNEs are the right way forward in helping institutions build capacity and stimulate regional development. Florax (1992) has highlighted the complexity of HEIs’ impact on regional development, specifying political, economic, social, cultural, educational, demographic, and infrastructural impacts. As the aim of Namal College is precisely to achieve socio-economic development in the region through academia, the literature review will narrow down on the role of universities on the regional economic development. But first, the impact of higher education in general will be discussed.

2.3.1. Impact of Higher Education

In the recent past, according to Armstrong and Batten (2011), discussions of education and development focused on the importance of primary and secondary education because it was considered more important to teach the masses to read than to teach a small privileged group high-level sciences and liberal arts. It cannot be denied that primary and

secondary education are both crucial to the development of a society, however, “an approach that pursues primary education alone will leave societies dangerously unprepared for survival in tomorrow’s world.” (Task Force on Higher Education and Society, 2000, p.16). A new generation of studies (see Colclough, Kingdon, & Patrinos, 2009; Aslam, 2009) notably suggest that the rates of return on investments in higher education exceed those for primary and secondary education. Human capital, which is defined as the knowledge, skills, competencies and attributes embodied in individuals that facilitate personal, social and economic development (Fender & Calver, 2014), created in all levels of education, especially at tertiary level, has substantial consequences on both the individuals and the society (Pseiridis, Lianos, & Agiomirgianakis, 2016).

Higher education is regarded as an indicator of people’s competitiveness in the job market (Freeman & Thomas 2005). It provides opportunities in the burgeoning knowledge-based economy and increases their economic prosperity. Thus, the economic benefits, with regards to individuals, include higher incomes and better employability (Schultz, 1961). With regards to society, investment in human capital is a crucial factor of economic growth, innovation and productivity (Barro, 1997). For instance, the growth of Europe and the United States can be attributed largely to the success of their universities (Armstrong & Batten, 2011). A 17-country data set compiled by Reynolds, Bygrave, and Autio (2003) showed that tertiary graduates created more jobs and were involved in the creation of new firms or start-ups than those with less education. There are also non-economic benefits to the society, which indirectly strengthen the national economy because the intellectual ability and skills of a population is not only a private human capital but a national asset (McGettigan, 2013); for instance, countries with high literacy rate benefit politically, economically and socially because there is a better choice of political representation, better understanding of contraception, lower crime rate, better health, etc. (Wolfe & Haveman, 2002). Moreover, universities produce professionals, such as doctors, engineers, lawyers, teachers, etc., who play a crucial role in the development of a society (McGettigan, 2013).

Developing countries have not put higher education at a high priority. A study conducted in the context of Pakistan, upon analysing the relationship between human capital and economic growth, found that one percent increase in human capital can result in almost 40 percent increase in the GDP (Abbas & Peck, 2008). Higher education institutions in Pakistan have a central role to play in national and regional development, however this role has been neglected by far too many governments. Governments that fail to recognize idiosyncrasies of academia will diminish the opportunities of national development (Bloom & Rosovsky, 2011). Altbach (2007) expressed concerns over Pakistan that if it does not develop competitive quality capacities in higher education, it may face marginalisation in the region, while the economy of other Asian countries become more technology and service based. For example, Japan and Singapore have transformed into post-industrial information-based societies, while China and India have moved partly into this realm, as have South Korea, Taiwan, and Malaysia. All these countries have recognized the role of higher education as drivers to national development, thus the performance of their universities is of high national priority (Bloom & Rosovsky, 2011) as they want to ensure at least part of their university system is prepared to function in the new knowledge-based economy (Altbach, 2007).

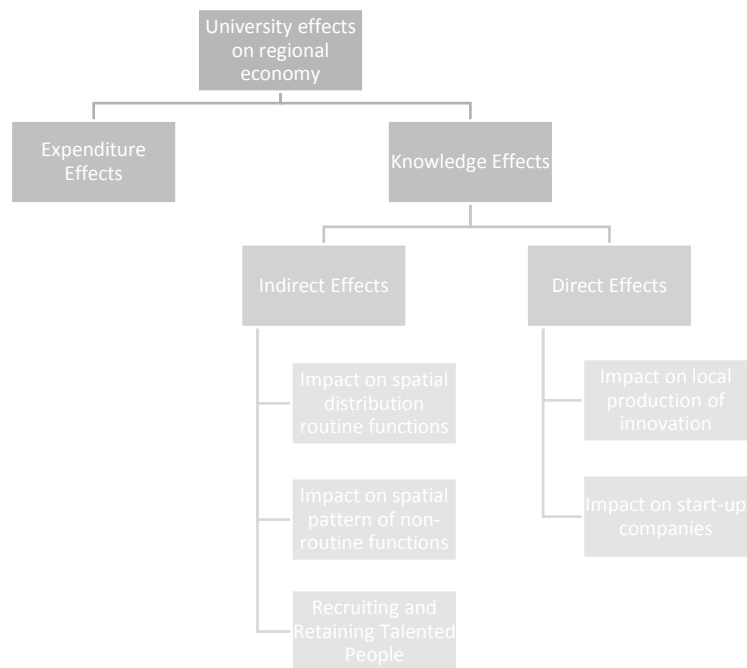
2.3.2. Impact of Universities on Regional Economy

There is extensive literature available that examines the role of universities on regional economic development. For instance, universities contribute to regional economic development by excelling in advanced research and commercialisation of inventions (Uyarra, 2010), and by augmenting the region's stock of human capital (Oketch, Mccowan, & Schendel, 2014). It is certainly plausible that ideas generated by the faculty, the pool of talented graduates, the high quality libraries and other facilities can facilitate the process of research innovation in universities into commercial innovation in the neighbourhood (Jaffe, 1989). Premus (2003) avers that a strong university system has the potential to stimulate regional economic growth. However, he points out that although a strong university system has the potential to stimulate regional growth, it also depends upon how the university-industry connection is structured and coordinated (Premus, 2003).

Florax and Folmer (1992) claim that the presence of a university has two types of effects on the regional economy: the expenditure effects and the knowledge effects. Expenditure effects are a result of the expenditures by the university, faculty, staff, students, and visitors, that generate changes in regional income and employment, see e.g. studies by the National Association of State Universities and Land-Grant Colleges (1997 and 2001). The term ‘knowledge effects’ refers to the specific ways universities can influence local economy (Varga, 1998). Knowledge effects are facilitated via local university technology transfers, which can have a direct effect or an indirect effect on the regional economy (see Figure 1).

Figure 1

University effects on the regional economy



Source: adapted from Steenhuis and Gray (2006)

2.3.2.1. Direct Knowledge Effects

Direct effects of universities are divided into two categories: the effect of university research on the local production of knowledge; and the effect of universities on start-up companies (Steenhuis & Gray, 2006).

2.3.2.1.1. Impact on local production of knowledge

There has been extensive research conducted on the effects of university research on the local production of knowledge. The production of knowledge is based on two factors: private R&D and university research (Jaffe, 1989; Acs, Audretsch, & Feldman, 1991). Literature also indicates the degree to which university research affects local knowledge production depends on: (a) The type of knowledge produced at the university (basic) versus what is required by industry (applied) (Parker & Zilberman, 1993). This is associated with academic barriers to produce industry relevant results (Goldfarb & Henrekson, 2003). (b) The type of industry, which may reflect differences in technological regime, for instance, under the ‘entrepreneurial regime’, the underlying technological information required to produce an innovation is likely to come from basic research and from outside of the industry, while under the ‘routinised regime’, an innovation is likely to result from technological information from an R&D laboratory within established firms (Winter, 1984). And (c) the firm size (Link & Rees, 1990). Spillovers from university research are more important for small firms in producing innovative activity because, compared to large firms, small firms are able to transfer knowledge gained from their university research laboratories most effectively to increase the returns to their internal R&D activities (Link & Rees, 1990).

2.3.2.1.2. Impact on start-up companies

The growth of successful industries is marked by spin-off companies, and a high frequency of spin-offs create even more spin-offs. Thus, the spin-off process is crucial for the emergence of regionally clustered technology-based industries (Steenhuis & Gray, 2006). However, it has been noted that the frequency of university start-ups varies across universities (Gregorio & Shane, 2003), and the reasons why some may have a higher rate of start-ups depends on the university’s intellectual eminence, and two university policies: (a) making equity investments in lieu of patent and licensing costs; and (b) maintaining a low inventor’s share of royalties (Gregorio & Shane, 2003).

2.3.2.2. Indirect Knowledge Effects

Firms may locate in the region to take advantage of innovative and economically useful ideas generated at universities. Varga (1998) made a distinction between firms with routine functions, such as mass production, and non-routine functions, such as prototype production and R&D. For non-routine functions, there is a relationship between its location and universities. As an example, 'biotechnology is a new, knowledge-based industry predominantly composed of small firms. Location of biotechnology companies is primarily explained by the location of the researcher who is actively contributing to the basic science' (Varga, 1998, p. 18). Attracting talented people (Florida, 2002) and the retention of talented people (Tornatzky et al., 1998, 2001) in the region are also related to indirect knowledge effects. Hence, university research can enhance the attractiveness of the region for companies and personnel, leading to regional development (Steenhuis & Gray, 2006).

Moreover, universities can play an indirect role in the regional development by providing space, equipment and facilities for innovative firms to interact and develop, and by assisting in the establishment of networks (Universities UK, 2015). An example of this is the SETsquared, which is a university-led business incubator formed by the collaboration of five universities in the UK, i.e. the universities of Bath, Bristol, Exeter, Southampton and Surrey, to support new companies by providing them access to academic research, and opportunities to establish research partnerships, collaborate with industry specialists, entrepreneurs, and investors (SETsquared, 2003). Companies incubated by SETsquared have created 9,000 jobs since 2002 and the number is expected to reach 14,200 by 2025 (Universities UK, 2015). A win-win situation is created as universities benefit from the effective transfer of their research findings and technologies developed by their faculty into commercially viable products (Link & Scott, 2006), while the local economy benefits through the creation of high-tech jobs in the region (Schultz, 2012). National University of Sciences and Technology (NUST), a Pakistani research-intensive university that has made it into the top 500 world universities on QS World

University Ranking (NUST, 2017b), has taken similar initiatives. For instance, NUST Technology Incubation Centre (TIC), Pakistan's first technology incubation centre established in 2005, enables academia and industry to come closer by providing NUST students and faculty a platform to commercialize their research, final year projects and other technology-based business ideas (NUST, n.d.). Amongst the many start-ups incubated at TIC, some have made global waves and won international prizes, for instance Orbit (NUST, 2017c); Awaaz (NUST, 2017e); APIMatic (NUST, 2017a); and DealSmash (NUST, 2017d). Moreover, NUST plans to set up Pakistan's first National Science and Technology Park (NSTP) and Medical Devices Development Centre (MDDC) for the indigenous production of heart stents (Tribune, 2018b). The university intends to utilize local talent in producing innovative technologies and the MDDC will serve as a platform for research on medical equipment (Tribune, 2018b).

It can be concluded that the presence of a university has multiple effects on regional development; expenditure effects lead to economic development, knowledge effects lead to technological development, and higher education in general increases human capital, which leads to both social and economic development. However, external factors play an important role in determining the actual impact on the regional economic development (Steenhuis & Gray, 2006), which can be explained by the 'Triple Helix' concept (Etzkowitz & Leydesdorff, 2000; Leydesdorff & Etzkowitz, 1998, 1996).

2.3.3. Triple Helix Concept

The triadic relationship between universities, industries, and government was formally articulated using the Triple Helix concept developed by Etzkowitz and Leydesdorff (2000). It is a framework that describes how multiple sectors of a local economy integrate to create a regional innovation infrastructure that will ultimately promote economic development (Schultz, 2012). Under the 'Triple Helix' concept, universities have an additional mission of regional economic development, beyond their traditional roles of teaching and research (Schultz, 2012). Knowledge-based economies, such as the UK, recognize that innovative firms need to work closely with universities and the government

to invest into the existing potential of local economies. For example, the aerospace industry in the UK is number one in Europe; supporting more than 3,000 companies and employing around 230,000 people, and it is expected to grow at a rate of 6.8 per cent in the near future (Department of Business Innovation & Skills, 2015). However, the industry is at risk as the next generation of aircrafts will feature substantially different product and manufacturing technologies. Hence, through close partnership with industries and universities, the Aerospace Industrial Strategy, one of the eleven sector strategies of the UK Government, focuses on investment in the research and development of four key areas of modern aircraft which the UK is specialized in, namely wings; engines; aero structures; and advanced systems (Department of Business Innovation & Skills, 2015).

2.3.4. Conditions for university impact on regional economic development

Tornatzky, Waugaman, and Gray (2002) used a benchmarking approach to describe what the 'best in class' institutions were doing that might differentiate them from their peers. Twelve universities were included in the study (Tornatzky et al., 2002). The most important findings are that these universities take (a) a comprehensive approach by mounting a wide variety of linking mechanisms including research partnerships, entrepreneurship development, career services and placement etc. Since the needs of industry and the local economy evolve over time, therefore, the university needs (b) active 'boundary-spanning' functions with the industry and the local and/or state government in order to alter and refine its strategy as their needs and circumstances change. However, Tornatzky and team (2002) emphasized that (c) using universities to enhance regional and technological development may require a very long time, hence the following factors can assist in the development and maintenance of partnering activities: (C1) Leadership: as universities are conservative organizations in terms of their basic orientations and priorities, it therefore takes a strong and persuasive president or chancellor and senior leadership to push the partnership agenda forward. (C2) Supportive conceptual and language systems: it is necessary to have a supportive organisational 'culture' that rests on a body of beliefs, and values in the form of vision statements, mission statements, strategic planning documents, and mottoes. In addition, this culture must be ingrained throughout the university. (C3) Organisational structures and policies: it is important that

organisation structures and activities that are novel within the larger university community were put in place and also maintained because often there is initially a lot of enthusiasm and visibility when innovative approaches are developed but later on this dwindles. (C4) Regional policy and political context: many of the universities cited in the study were active partners with their respective state governments which lead to other benefits, such as friendlier discussions, more consultative sessions on university-sensitive legislation, as a result of which university campuses are not seen as hostile environments by legislators (Altbach, 2007).

3. Methodology

Chapter Summary

Chapter 3 talks about the methodology used for the purpose of this research. An overview of the qualitative case study is given at the beginning followed by a detailed account of instruments used to collect the data, the sample size, and the selection criteria are given. Then, data analysis techniques are discussed. The trustworthiness of case study is discussed as well, and finally, insights into the ethical considerations undertaken by the researcher are provided.

3.1. Research Design

This research is a case study, which refers to “an intensive, holistic description and analysis of a single instance, phenomenon, or social unit” (Merriam, 1988, p. 21). The research adopts a qualitative approach as qualitative inquiry is inductive, focusing on process, understanding, and interpretation (Merriam, 1988). In line with Creswell (2013), invitations were purposely extended to staff representing administrators and senior academics, final year undergraduate students and employers from the IT sector to ensure appropriate representation. Semi-structured interviews were used as a means of data collection. According to Gillham (2000), a major positive feature of interviews is “the richness and vividness of the material it turns up” (p. 10). Interview questions were based on the research questions of the study⁵. They were open-ended and broad in context “so as to widely cast the research net” (Skulmoski, Hartman, & Krahn, 2007, p. 10).

Philosophical assumptions underlying the case study draw from the qualitative research paradigm rather than the quantitative (Merriam, 1988). The study covers both epistemological and ontological considerations as it adopts the constructivist – interpretive approach. Hitchcock and Hughes (1995, as cited in Cohen, Manion, & Morrison, 2011) suggest that ontological assumptions are about the nature of reality and the nature of things which give rise to epistemological assumptions that refer to ways of researching and enquiring into the nature of reality and the nature of things which then give rise to methodological considerations, and

⁵ See Appendix A

these, in turn, give rise to issues of instrumentation and data collection. There is a golden thread in which all the above-mentioned nature of enquires take place one after the other.

Ontology compartmentalizes positions between objectivism and constructivism. Constructivism suggests that “each human constructs his or her own reality, based on their perceptions of their experiences within society”, which “can change as our experiences change, and so does the social context we perceive” (O’Toole & Beckett, 2013, p. 17). The role of a TNE in regional development is highly susceptible to the interactions between social behaviours that are shaped by participants from the university, industry, and government. The constructivist ontological approach is therefore most relevant to the research being conducted.

The epistemological approach was interpretive as it is suitable for analysing the role of TNE on regional development given the reliance on human behaviours and social constructs. An interpretive researcher sees reality as a construct of the human mind; people perceive the world in similar but not necessarily the same way (Bassey, 1999). Moreover, the purpose of research to an interpretive researcher is to advance knowledge by describing and interpreting the phenomena of the world, and may offer possibilities to the outcome of the event but not certainties (Bassey, 1999).

3.2. Instruments

3.2.1. Interviews

Interviews were the primary mode of data collection. It is the most common instrument for data collection in a case study (Merriam, 1988). The interviews were semi-structured; hence they were guided by a list of questions but neither the words nor the order of the questions was determined prior to the interview. As the research is based on an interpretive constructionist paradigm, semi-structured interviews were one of the most appropriate methods used for data collection which can enable the researcher to learn how people view and understand different objects and events (Rubin & Rubin, 2012).

Trialling of the interview questions was done with the researcher’s colleagues. This step involves trying out possible questions usually on someone neutral, preferably from the

same kind of age or occupational group (Gillham, 2000), i.e. not necessarily in the setting one is researching. Trialling questions does a number of things, one of which is that it “highlights key questions and indicates those that are redundant, and those that need rethinking” (Gillham, 2000, p. 22). The interview, in a developed state, was then piloted, which is an advanced stage of interview development where the researcher gives the research interview a trial run (Gillham, 2000). The pilot was done in the actual setting.

The interviews were mainly conducted on the university campus, in staff rooms, and in the student common room at the student hostel. Each interview lasted between 40 to 50 minutes. All the interviews were audiotaped, with the knowledge and permission of the participants. The interviews were conducted in either English or Urdu, depending on which language the interviewees felt more comfortable in expressing themselves. The interviews were transcribed verbatim, and the Urdu parts translated. All the quotes provided in this study were stated originally in English, unless indicated otherwise. The researcher rented a guest house at the institute’s student and staff accommodation in Chagdah, which is about 10 kilometers away from the main campus. The researcher spent the initial three days interacting with teachers and students prior to conducting official interviews. This helped to establish trust and a deeper rapport with the participants.

3.2.2. Documentary Analysis

Documents, broadly defined to include public or archival records, personal papers, physical traces, are a major source of data in case study as they help the researcher “uncover meaning, develop understanding, and discover insights relevant to the research problem (Merriam, 1988, p. 118). Moreover, it is methodologically unsound to rely on only one source of information when collecting data, hence documentary analysis was conducted in addition to interviews in order to triangulate different data collection methods to increase the internal validity of the research findings (Lincoln & Guba, 1985). The documents analysed include alumni employment record of 2012 – 2017 cohort; record of financial assistance of final year undergraduate students; Namal College official website; newspaper articles; and reports on TNE activity in Pakistan.

3.3. Sample Selection and Criteria

A total of 17 participants were selected to participate in the study. The sample size used in the study is consistent with Crouch and Mckenzie's (2006) claim that a smaller sample, typically less than 20, is ideal for qualitative interviews, as the main goal is understanding the issues in depth by creating close association with the respondents. Interview participants included university faculty, students, and employers.

3.3.1. Faculty

Three senior faculty members were approached using purposive sampling, which is used in order to access 'knowledgeable people', i.e. people who have in-depth knowledge about a particular issue, maybe by virtue of their professional role, power, expertise, experience or access to networks (Ball, 1990). Although this sample may not be representative nor generalizable, this is not the primary concern in purposive sampling. The concern is rather "to acquire in-depth information from those who are in a position to give it" (Cohen, Manion, & Morrison, 2011, p. 157). Then, the snowball technique was employed to recruit more participants and determine the sample size. According to Cookson (1994), when the names of the major players, i.e. senior administrators and academics, start to repeat, the researcher can assume that the sample will suffice for the study. Through this technique, two more participants were interviewed, hence a total of five senior academics and administrative staff members were approached. It is difficult to conceal the identity of 'elite' interviewees, however, a conscious effort has been made to protect their identity, thus they will be referred to as A1 – A5 in the study.

3.3.2. Students

Another group of participants were final year students from the Bachelor of Science (Hons) in Computer Science (CS) and Bachelor of Engineering (Hons) in Electrical and Electronic Engineering (EE) programs. In total, 10 students were selected using the purposive sampling technique for in-depth, semi-structured interviews. Four participants are from the local region, i.e. Mianwali, which has the largest representation of students at Namal College. The rest of the six participants are each representing students from other

districts of Pakistan studying at Namal College. To protect students' identity, each student participant is assigned an alphabetical letter as a pseudonym (see Table 2).

Table 2.
Details of Student Participants

Participants	Gender	Hometown	Merit-based Scholarship/ Need-based Sponsorship/ Self-financed	Degree
Student A	Female	Mianwali	Need-based sponsorship	CS
Student B	Male	Mianwali	Self-financed	CS
Student C	Male	Mianwali	Need-based sponsorship	CS
Student D	Male	Mianwali	Need-based sponsorship	EE
Student E	Female	Lahore	Need-based sponsorship	EE
Student F	Male	Chakwal	Need-based sponsorship	CS
Student G	Male	Islamabad	Need-based sponsorship	CS
Student H	Male	Faislabad	Need-based sponsorship	CS
Student I	Male	Dera Ismail Khan	Need-based sponsorship	CS
Student J	Male	Karachi	Need-based sponsorship	CS

3.3.3. Employers

The final group of participants was employers from the IT sector. Two participants were selected to be interviewed using convenience sampling during the Open House event at Namal College. To protect the identity of the participants, they will be addressed as E1 and E2 in the study.

3.4. Translation

The researcher was aware when reading the transcribed and translated interviews that transcription and translation are forms of social act, and that transcribers and/or translators may bring their own perspectives to the text, compromising the objectivity when transcribing or translating (Roberts, 1997). The literature on how to deal with bilingual data is "sparse and almost non-existent" (Halai, 2007, p. 351). While transcribing the interviews from Urdu to English, it was difficult to capture the essence and purity of specific words and idioms in Urdu used by the participants. Hence, back-translating technique was used 'in order to assure the accuracy and quality of the translation, and to eliminate any translation-related problems' (Nazroo, 2006, p. 90). Data was initially translated from Urdu to English by the researcher and then the transcripts were translated back to Urdu by another individual proficient in the

language. The typed transcripts were then compared ‘to determine how closely they match’ (Nazroo, 2006, p. 90).

3.5. Data Analysis Technique

Braun and Clarke's (2006) model of thematic analysis was used to analyse the qualitative data collected because of the study's emphasis on analysing the data set as a whole (Flick, 2014) to understand the role of TNE, i.e. Namal College, on the regional development. Similarities and differences emerged after the initial review of the transcripts with some obvious highlights, which were categorised under the initial codes. These initial codes were then constantly refined to form themes.

3.5.1. Coding

The process of coding is fundamental to thematic analysis. The coding method is a procedure for organizing the text of the transcripts and discovering patterns within that organizational structure (Auerbach & Silverstein, 2003). Codes are labels generated by the researcher to recognize and identify themes, concepts, events, and examples (Rubin & Rubin, 2012), which condenses the qualitative data into analysable units. The researcher used manual entry using Microsoft Word to divide the collected data into columns and highlighted relevant data into different codes (Braun & Clarke, 2006). A colour was assigned to each concept and all the notes were coded using a colour key.

3.5.2. Themes

Once coding was complete, broad themes were established. The names of the themes “are abstractions derived from the data, not the data themselves” (Merriam, 1998, p. 181). They were constantly reassessed and refined by repeated familiarization and thorough reading of the interview transcripts. Cookson (1994) gives an analogy of data analysis in a qualitative research study as “more akin to making a good soup than eating fast foods” (p. 129) because the objective is to remain true to the words of the respondents with minimum interpretation before jumping to conclusions. A number of overarching themes emerged, including: Branded Education; Affiliation with Bradford – a stepping stone or a mistake;

Economic Activities; Knowledge Transfer; Social Change; the Imran Khan Factor; and Leadership.

3.6. Trustworthiness in case study

Reliability is the extent to which the research findings can be replicated, and validity is the extent to which the research finding is what it claims to be. In case study research, these concepts are problematic since a case study is the study of singularity (Bassey, 1999). However, several strategies were employed to ensure internal validity, reliability, and external validity:

3.6.1. Internal validity

Internal validity deals with the question of whether the research findings match reality. This has been enhanced by triangulation of data collection methods (Lincoln & Guba, 1985); and peer-review (Gillham, 2000). Peer review, also known as ‘double-checking’, was conducted (Gillham, 2000) as part of the data analysis procedure. An unmarked transcript was given to a peer of an equivalent academic standing who was asked to highlight what she sees as substantive statements in the transcript after having explained the nature of the research to her. These were then cross-checked with the substantive statements or themes identified by the researcher. It is because we cannot achieve ‘definitive’ categories and the judgement is rather subjective, by conducting peer-review, the rigour of data analysis can be enhanced to a certain extent (Gillham, 2000).

3.6.2. Reliability

Reliability is problematic in the social sciences simply because human behaviour is never static, hence replication of a qualitative study will not yield the same results (Merriam, 1988). That, however, does not discredit the result of the original study until directly contradicted by new evidence. Lincoln and Guba (1985) suggested “dependability” (p. 288) as alternative to reliability, and to ensure the results are dependable, Goetz and LeCompte (1984) suggested the following techniques to strengthen dependability of the study results, including providing a detailed account of participant selection and criteria;

the context in which the data was collected; and conducting triangulation of data collection methods (Lincoln & Guba, 1985), all of which were discussed in this chapter.

3.6.3. External validity

External validity is concerned with the extent to which the findings of the study can be applied to other situations (Merriam, 1988). In other words, how generalizable are the results of the research? Cronbach (1975) proposes “working hypotheses” (p. 125) to replace the notion of ‘generalization’ in social science research. He makes the point that since generalization decay in time, even in the hard sciences, it should not be the aim of social science research. Patton (1980) shares this view of generalization as well by putting forward the argument that qualitative research should “provide perspective rather than truth, empirical assessment of local decision makers’ theories of action rather than generation and verification of universal theories, and context-bound information rather than generalizations” (p. 283). Nevertheless, to enhance the transferability of a case study’s results even in the sense of a ‘working hypotheses’, the investigator has provided thick description of the study, which can provide anyone interested in transferability a base of information to determine the extent to which findings are transferable from one research to other situations (Lincoln & Guba, 1985).

3.7. Ethical Considerations

The research was duly approved by the Central University Research Ethics Committee (CUREC)⁶ of the University of Oxford and conformed to the British Educational Research Association Ethical Guidelines for Educational Research. An email was then sent to the Director/Vice-Chancellor of Namal College, requesting his approval to conduct fieldwork on his campus with his students and staff members. All the research participants, i.e. students, staff and employers, were given the information sheet⁷ to read in order to understand the nature and purpose of the research, and then they were asked to sign a consent form⁸ before participating in the research. Participants were informed of their right to withdraw at any time

⁶ See Appendix B

⁷ See Appendix C

⁸ See Appendix D

or to refuse to answer questions that they do not wish to. The respondents were also assured that their individual responses would remain confidential and only be accessible to the researcher. Every effort was made to preserve confidentiality, but this cannot be fully guaranteed by the nature of this research, as it is a case study of a specific institute, it is possible that participants may be identifiable. However, complete honesty was demonstrated on the part of the researcher at the beginning of the research. It was made clear to the respondents that the purpose of this study was purely for research, and that it does not represent interests of the Government or any other non-government agency.

4. Findings

Chapter Summary

Chapter 4 presents the findings from the data collection and analysis procedure. The emergent qualitative themes are presented.

4.1. Branded Education

There is a general perception that a foreign attested degree is more valued in Pakistan. This was reflected in the findings as one of the major reasons for students to apply to Namal College was its affiliation with Bradford University. A total of 8 student interviewees out of 10 stated that they came to Namal because of its affiliation with Bradford University.

A3: “when we go to classrooms and ask why you joined Namal, most of the students, at least 60 percent clearly give their first priority to join Namal was because of Bradford University.”

A4: “One blessing in disguise for us was that there's already a mindset within Pakistan, it's a cultural/ social thing, so there's a phenomenon called ‘Bahir ka Thapa’⁹... It doesn't even matter whether Bradford has an international standing or not as long as it's a ‘bahir ka thing’¹⁰, it will have its weight here. So, because of that, in just six or seven years of its inception, Namal started attracting very good students. Otherwise it's hard to imagine anyone leaving Lahore, Karachi, Islamabad, Peshawar, Multan and come to a village setting. So, it did work for us in wonderful ways.”

In a recent development, the collaboration between Namal College and the University of Bradford is now drawing to an end as the University of Bradford is ceasing to recruit students for BEng Electrical and Electronic Engineering programme at the home campus. As part of the agreement, for reasons of exclusivity, Namal College has also withdrawn from the franchise agreement with the University of Bradford for BSc in Computer Science program and has started a collaborative partnership with the University of Education and Technology (UET) in Lahore for the delivery of the two programmes that were being offered by the University of Bradford. However, as Namal’s long-term strategic plan is to become an independent degree awarding institute and then transform the region into a Knowledge City (Namal Knowledge City, n.d.), hence its fate did not end with the departure of Bradford

⁹ Translated as ‘Foreign attested’

¹⁰ Translated as ‘Foreign thing’

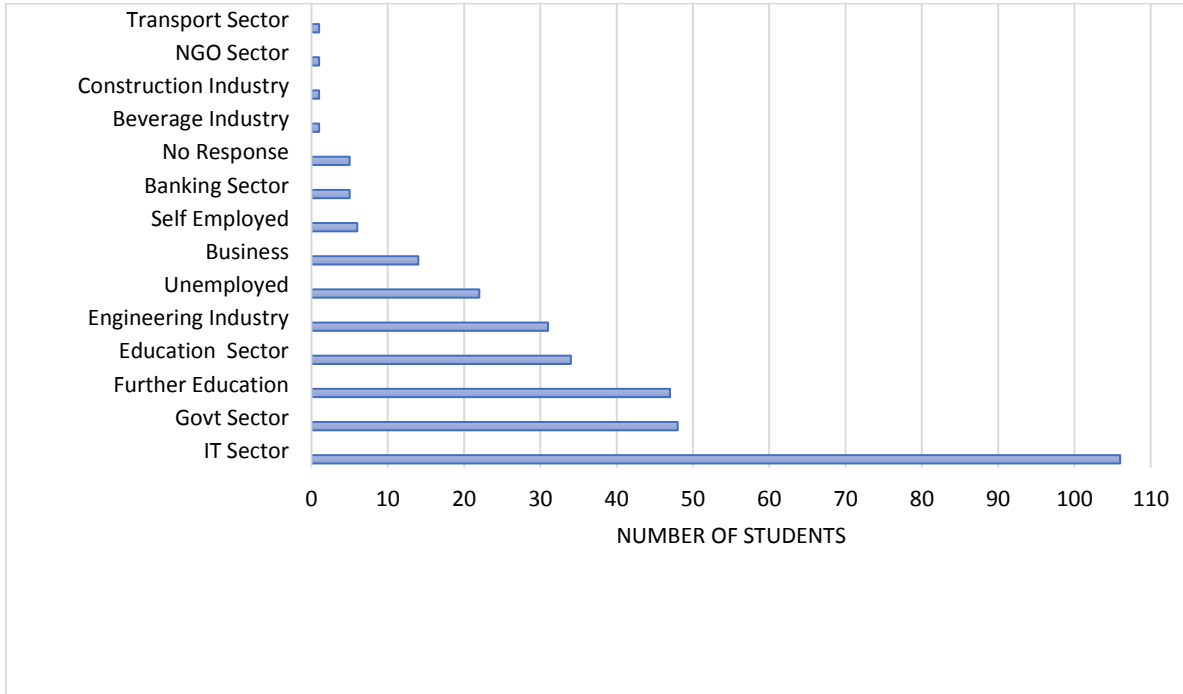
University. Nevertheless, with Bradford's departure from Namal, there has been a visible decline in the quality and quantity of applications (A5). Participant A5 continued stating "whether this is a short-term dip or a long-term, depends how Namal brands itself in the coming future".

Based on the primary data (i.e. interviews with students, academics, and employers) and secondary data (i.e. alumni employment record of 2012 – 2017 cohort) provided by the university (see Figure 2), a 'branded' degree certificate alone is not enough to attain employment. While it may help students to go abroad to seek postgraduate education or even land an interview, it certainly does not guarantee a job. Participant A3 commented on the impact of brand name in securing job opportunities by saying that: "it didn't play a big role in employment. It played a better role in helping students get international admissions." According to Figure 2, over the years, 47 students out of 322 progressed to postgraduate education upon graduating from Namal. Participant A1 pointed out that there was a natural bias amongst employers that foreign trained graduates are of higher calibre because of the general poor state of local universities. However, as the quality of local universities is improving, Pakistani employers have started to value graduates from local universities because they have a better understanding of the local market dynamics (A1). It was pointed out by E1 that as a potential employer, he prefers to look at the skills students possess and whether or not they can get their duties delivered. Academics at Namal take a similar view:

A3: "Our students try to get employed pretty much in local industry. Local industry is of computer science and electrical engineering. Computer Science industry is very different... people don't care about the degrees. What the employer cares most about is how much skills you have. Whether you have knowledge of the tools or interpersonal skills or the ability to solve the problems. So, international degrees sort of make you able to get into the interview. Beyond that, it's your own skills."

Figure 2

Alumni Employment Record of 2012 – 2017 Cohorts



Source: Namal College, 2018

Moreover, more than 40 per cent of the alumni (i.e. 133 out of 322) are employed by neither IT sector nor engineering industry, which was a concern of participant A2 who claimed that “a rosy picture is presented by the administration” of alumni employment record in which graduates appear to be ‘employed’ but they are not in fact employed into “high-tech jobs”.

4.1.1. Cultural Melting Pot

Although the dominant population of students are native to Mianwali district, Namal’s affiliation with Bradford University has attracted students from 53 districts across Pakistan, which has made the learning environment at Namal culturally diverse. Namalites interviewed have appreciated this factor about their university, however the researcher has noticed that students tend to cluster based on their geographical locations and ethnicities, i.e. Punjabi or Pashtuns.

4.2. Affiliation with Bradford: A stepping stone or a mistake?

The collaboration between Namal College and Bradford University was established on the insistence of Mr. Khan when he was offered the Chancellorship of the University of Bradford (Darnbrough, n.d.). Hence, the initiation of this partnership was not planned, which has also been echoed by academics at Namal College:

A3: “It goes back to 2007-2008. When the founder of Namal, Imran Khan, sort of had this vision that there must be an educational institute in this vicinity that may be converted into Namal Knowledge City one day. So, he started a technical college here and then... at that time he was offered the position of vice chancellor or the president of Bradford University. Uh, so he made it a condition that he will take that position, if you [Bradford] help us in establishing this [Namal] university. So that's how it started.”

A1, a senior administrative member of Namal stated that the affiliation with Bradford enabled Namal to “leap frog from starting from scratch” (A1) as it provided a ready-made curriculum, the technologies, i.e. access to databases, the brand name, and the staff training. However, four out of five academics criticised the partnership for not being planned out carefully, as a result of which issues on the relevance of the curriculum have arisen.

4.2.1. Curriculum and Relevance

Participants A2 claimed the “readymade curriculum from Bradford” helped Namal at the initial stage, however, just copying the irrelevant content, “does not help to fulfil the national needs”.

A2: “Curriculum is designed by a country according to its needs. The curriculum of Bradford of Electrical Engineering involved courses like Robotics, and those things which are needed in their society. So, copying their curriculum over here; having a franchised agreement says that we will just reproduce their content here, to me was a mistake. Our curriculum should have been designed to our needs. For instance, for us the need is energy power. We should have more courses on renewable energy... The agreement did not give us much freedom to teach those courses which are required by the industry or the national, local needs”.

Similarly, participant A4 states that there is a lot for students to explore in computer sciences, however Bradford University continues to recycle the content of the course and

assignment every passing year. An example was elicited by participant A4 to illustrate his argument:

A4: “There's a course, neural networks and fuzzy systems, which I teach here. They are sticking to datasets, like breast cancer data, from 1980s. We're going to teach the same course of course but we could have more meaningful data, which makes sense today, but they [the University of Bradford] didn't agree to it without any justification.”

Some academics have tried to modify the coursework, but there has been very little success. The programmes delivered by Namal are largely identical to those delivered by the University at its UK base. Since there is no potential for local modifications of a core syllabus to be accredited or validated, thus leading to a mismatch of the curriculum with the local and national needs, which may serve as a force of hinderance to the quality enhancement of the education within the institute, and to the regional economy.

Having said that, participant A4 also highlighted some merits of the British curriculum and pedagogy by contrasting it to the exam-oriented curriculum, and teaching and learning practices in local universities across Pakistan; a point also raised by all the student participants.

A4: “In Bradford's system, I came across as a teacher, I wish I had come across as a student as well... so there are certain courses here, which don't have any final exams. They don't have any quizzes as well. They just have mini-projects or 2 coursework; 50-50 or 40-60 percent. And uh, for instance, in computer science, there's a course called AI for games; artificial intelligence for games. And it makes total sense that students should be developing games, not sitting in a final exam, right? Imagine how ridiculous that would be. So that is one thing a lot of us are trying to retain. So non-standardization, in some sense, I think works. Not every course ought to have the same structure”.

When students at Namal were asked for their views about the difference in teaching methods in TNE programs and local programmes based on their present and past experiences, majority of them reported a significant difference. Studying at Namal College under the British curriculum brought by Bradford University, students (i.e. B, C, D, E, G, H, I & J) expressed that their learning attitude altered from wanting to get the highest

grade to developing a “learn-and-deliver” attitude (Student D); “more practical skills were gained through completing real projects” (Student E). Student G stated that “the teacher to student ratio is 1:10, which means there is more room for interaction between the teacher and the students” (translated from Urdu). Students claimed to have enjoyed a balanced academic life under the UK TNE program, which enabled them to learn diverse skills and explore their interests; “our juniors who are now under the UET curriculum have a lot of exams and quizzes, so they are busy revising all the time” (Student I, translated from Urdu).

4.2.2. Funding

Participant A2 points out that collaborating with Bradford was expensive: “Namal has been paying a very high franchise fee, we had to pay the student fee of about 50 students whether or not we had that many students” (A2). He continued saying that the money spent on franchise fee could have been spent on the development of the institution. For a vision like Namal’s, large amount of financial resources are essential for it to take shape quickly. However, besides the assistance in the acquisition of the land, i.e. 1000 acres, where Namal is standing today, there has been no additional assistance or financial support being offered to Namal by the government.

A1: “... it is all private money; we're not getting any huge funding from the government. This is a pretty expensive project because all of the construction in terms of developing our academic blocks, libraries, our hostels, our faculty residences. Uh, it's going to take a lot of effort and money.”

4.2.3. Networking Opportunities

It was, however, pointed out that the partnership with Bradford University brought international networking and exchange opportunities for Namalites, i.e. one term exchange program at the home campus. Nevertheless, it must be noted that the opportunity was open to only two academically competent students from each program (A3), leaving one question the impact of such provision. The findings indicate that all the student interviewees shared a unanimous opinion on the need and importance of overseas exchange programs, especially at the home campus where they can collaborate on projects

and build professional networks. Albeit Namal is trying to introduce multiple exchange programs to students, all student participants have expressed their preference for shorter overseas summer programs in lieu of one-term exchange program as the latter affects their academic progression over credit transfer issues.

4.3. Economic Activities

Participants have noted an evident increase of economic activities in the region since the establishment of the university. The hostel, for instance, accommodating about 500 students and staff members has also generated economic opportunities for local food suppliers, technicians, security guards, small business owners (A3).

A1: “The hostel facility, which is a hostel plus residence of faculty and staff, is about 15 kilometres away from here [the main campus], has created, you know, a lot of local purchases. So, they're benefiting from a 500-people facility in midst of a small town – Chagdah”.

There are multiple events held at the institute all year round in addition to the day-to-day activities of the university, all of which have generated income for the locals. For instance, campus coaches that run between the hostel and campus for students and staff are run by local transport agencies, which is the main business in the region. In addition, “convocations... annual gala dinners and dramas by Literary Society, ... all of these activities that we're trying to create” (A1) are successful with the support of sound systems, lighting, tents, and catering services, which are provided by the local suppliers (A1).

4.4. Knowledge Transfer

According to the academics, no industry or company relocated into the region, and there is only one start-up that has been recently established in the name of Shams-e-Tawani, which was initiated by a faculty member of Namal for which four Namalite engineers have been hired, and they are expecting to launch their product, i.e. solar inverters, soon (A2). Participant A5 pointed out that the lack of industry support is not unique to Namal; it's a national issue.

A5: “When you look at the European countries or US, a lot of funding for universities came from the industry because academia works on industry problems, in terms of research and R&D services. But that is not the case in Pakistan.”

In addition, the government imposes “high taxation on start-ups... probably 30 per cent during the first few years, while in many countries usually the start-ups are tax exempted for the first few years”, suggesting “there is a lot of work that needs to be done at government level” (A5). Both participants A2 and A5 claimed that the government has an important regulatory role to play to help bridge the industry and university gap. Moreover, participant A5 pointed out that collaboration of any kind with any tertiary institute is good, however for Namal to be an active player in the education sector and to have an impact on the regional economy, it needs “home-grown programs” (A5) to be able to address the regional needs.

The university is also finding it challenging to retain the talent in the region. Majority of the students at Namal College belong to lower socio-economic class, thus financial security is crucial for them even if they have to travel outside of their hometown (A5), i.e. Mianwali, in search for employment. When asked if the university uses the scholarship scheme as a tool to retain talent in the region by laying down conditions for students to stay in the region and offer their services for a certain period of time, the response was negative. Similarly, Namal has attracted young distinguished faculty; 19 out of 30 full time faculty members have doctorate degrees from UK, USA, France, Sweden, China, Malaysia, Singapore, Korea and Pakistan (Namal, n.d.-b). However, to retain this talent is a challenge that has been recognized by the institute.

A5: “The faculty retention is the most challenging thing because it's a remote area, for example schooling is a big challenge, hospitalization is another big challenge.”

In order to mitigate the problem, the College has taken it upon itself to establish a primary school that is run by the faculty of Namal for the children of the staff and faculty as there was no primary school in the neighbourhood that was offering quality primary education.

Participant A5 is optimistic that upon attaining the degree awarding status, the university has several major directions to move towards that will potentially lead to stronger university-

industry ties, resulting in higher knowledge effects that may stimulate the technological development in the region. The university can establish networks with companies focused on both routine functions and non-routine functions. For instance, in terms of routine functions, Namal College is strategically located as it is in geographical proximity to an industrial hub of Pakistan in Daud Khel, which has the Maple Leaf Cement Plant (A5). The region is also rich in minerals, such as salt and sulphur, and oil in some parts as well, hence there are mining industries established in the neighbouring regions that use “traditional mining practices” (A5). He suggested that Namal could play a crucial role in upgrading these regional industries, which may also serve as “a playground in the form of a salt range for Namal students...if Namal decides to start mining department or mining engineering” (A5). In terms of non-routine functions, “Namal could easily collaborate with Shaukat Khanum¹¹ on biotechnology” (A5) upon expanding the engineering department to biotechnology engineering. If these developments take place, A5 believes that the absorptive capacity in the region and at the institute will increase, which may help retain the talent in the region.

However, it is worth noting what participant A4 stated: “the entire education and its scope cannot and should not be reduced to employability” and that “university ought to be the last place to let go of the classical values when it comes to education” (A4). It will be interesting to observe the direction Namal College will adopt upon attaining its degree awarding status, and whether it can achieve a balanced approach as it develops into a Knowledge City.

4.5. Social Change

4.5.1. Social Services & Integration

The motto of Namal College, “shaping those who shape the future”, is socially rooted (A4). “Our intention is to train students who then become part of the rural [development] movement” (A1). The university tries to ingrain the motto into the university culture through various activities and social services:

¹¹ The participant is referring to the Shaukat Khanum Memorial Cancer Hospital and Research Centre, which is a chain of cancer hospitals in Pakistan. The hospital was also founded by Imran Khan with the vision to make cancer treatment accessible to every Pakistani citizen, regardless of his/her socio-economic background.

A2: “After 5 p.m., a student society – the Society for Social Impact, they conduct classes for Metric and FSC students which is like the O-level, A-Level exam in Pakistan. So, they teach those courses to students from local colleges and schools. It’s free and open for all; male and female.”

A3: “This region is declared as the Olive Valley of Pakistan... we have planted like several hundreds of olive trees here and plus several hundred of other trees as well... There is another initiative from Namal College. So, there is a student society which maintains a list of all the volunteers in Namal College who have shown their interest in donating blood... when locals request that they need blood of a certain type, we find the volunteer with the matching blood type and help them. So, there is definitely a strong element of social responsibility in our university, which is probably not as evident in other universities.”

The institute also serves as a platform for artists, social entrepreneurs, and other leading figures in the community to conduct workshops and lectures. For instance, an artist named Mosavir Munir is from a nearby region, about 50 kilometres away from the campus, who has been invited to Namal several times to conduct art workshops (A3). However, these workshops and lectures are not open to public access.

Students have also shared their experiences of how they have been engaging with their local communities; offering their services and transferring their knowledge and skills to the less advantaged.

Student D: “Majority of the students in rural schools do not know how to use computers. So, I volunteered to teach multi-media classes for 3 months in one of the local village schools last summer.” (translated from Urdu)

4.5.2. Trend Setters

Namal College was purposely built in a rural setting to provide foreign attested degrees to students from underprivileged backgrounds as it recognises that majority of the youth in rural Pakistan is unable to attend city-based tertiary education, due to either financial reasons or cultural restrictions, particularly on girls.

Student A: “No one from my family has received tertiary education before. My father was in favour of girls seeking higher education, but he passed away before my

university admission. All of my brothers and uncles were against it, except for one brother. I was also determined to fight. Also, this university, with an internationally recognized degree, is built in my hometown (Mianwali), so I should take advantage of it. After some time, my family gave me the permission to study. And now they have no issue even with my younger sister studying in another city – Islamabad, for her degree.” (Translated from Urdu)

These students have also become role models or trend setters; paving the way for their younger siblings, cousins or children of fellow villagers who aspire for higher education.

Student I: “Once, I started university, I was able to convince my family to enrol two of my younger sisters into school. And then our extended family saw us and followed... Education gives you respect, and that is how you become a role model.” (Translated from Urdu)

Currently, Namal is providing merit-based and need-based financial support to majority of its students. Based on the data provided by the institute, 63 out of the 76 final year students from the 2017 – 18 cohort are provided with 100 per cent to 50 per cent fee waiver.

4.6. The Imran Khan Factor

The Imran Khan factor is one of the most notable findings of this study because some students have travelled over 1, 200 kilometres from Karachi; a cosmopolitan city, and from the capital city of Islamabad, where there is no shortage of well-established universities, just to be a part of Imran Khan’s vision and mission. They believe in him; his credibility, and hence believe in the success of this project.

A1: “Fortunately for us, Imran Khan's name, authenticity and his credibility in terms of establishing, you know, Shaukat Khanum... Mr Khan's credibility as a philanthropist... who takes social causes very seriously, is undoubted in Pakistan.”

Student G: “I wanted to be a small part of Imran Khan’s dream. His vision to uplift Pakistan. So, being a student here is my way of supporting that movement.” (Translated from Urdu)

Another participant, Student J, also stated a similar reason for choosing Namal College as the tertiary institute to attain his undergraduate degree from. He continued saying that he had

greater respect for Imran Khan once he started studying in this environment that was absent of any political presence of Pakistan Tehreek-e-Insaf (PTI), the political party that Imran Khan chairs: “You probably noticed that there are no photos of Imran Khan or political banners of PTI around the campus” (Student J). This was indeed true; the researcher observed that there was not a single photo of Imran Khan, the founder of Namal College, hanging on the walls of the institute, nor was there any political presence of PTI. In fact, conscious efforts are taken on the campus to avoid any form of political activity taking place at the institute that may politicise the environment. According to an anecdote by Student G, when Imran Khan was in the district to hold a political rally, the institute was informed to extend the class period, so the students may be prevented from participating in the rally. This is an evidence of how Imran Khan and/or his political party consciously try to avoid making Namal College their political playground. This also indicates the internationalization of Namal College, i.e. its affiliation with Bradford, embodied a force for the public good and was not meant to serve as a tool to forward the Mr. Khan’s political career.

4.7. Leadership

It has been pointed out by two out of the five academics as well as one of the employers interviewed that Namal has been experiencing instability in senior administration, which has resulted in inconsistencies, especially in terms of academia – industry collaborations.

A5: “Changes in administration, especially top administration is quite challenging, probably this is 6th or 7th director of Namal in its 10 years of history”.

E1: “I have been saying this repetitively that final year students should collaborate with companies on actual projects for a whole year. Companies will give preference to such collaboration over 1 to 3 months internships, which don’t have high productivity. But with the change of management, the consistency, the communication chain is broken.”

It was concluded by participant A5 that Namal is not a typical Pakistani tertiary institute; hence it is a challenging task to manage it. He continues to suggest “some kind of out-of-the box

thinking is required. There is a verse of Iqbal¹² ‘Jawaano ko peero ka ustaad kar’ that means you prefer youngsters over the old guns. So probably instead finding the seasoned, the experienced professional, probably you can give the chance to a young person” (A5).

¹² Mohammad Allama Iqbal (1877 – 1938) was a poet and a philosopher who is regarded as the Spiritual Father of Pakistan. He is also known for inspiring the Pakistan Movement which sought to establish a new nation-state from British India.

5. Discussion

Chapter Summary

Chapter 5 conducts discussion on the findings ensued from the data. This section will establish the relation between the findings of the research and the existing literature on transnational education in developing countries and their impact on regional development.

In this study, the following three research questions were put forth:

1. What is the impact of TNE, i.e. Namal College, on the regional development?
2. What is the stakeholders', i.e. students' and academics', perspective on the role of TNE?
3. What are the barriers of TNE to regional development?

Research question 1 is an overarching question the answer to which offers a surface level understanding of the impact of the TNE on regional development. Research question 2 explores the impact of the TNE from the stakeholders' perspective, and research question 3 aims to identify the potential barriers of the TNE to regional development at the institutional level.

5.1. Impact of TNE on regional development

Based on the research findings, it can be concluded that Namal College, as a UK TNE, has stimulated social change and economic activities to a certain extent. The participation of staff and students in the local community has increased the level of trust between academia and the community. Moreover, the involvement of staff and students in the local community helps to achieve greater social equity, and cultural presence of an academic organization (Parker & Williams, 2011). A direct impact of this may lead to an increased participation of local students from disenfranchised groups. However, the use of the institute's resources and facilities are restricted to the students only, mainly for security reasons. An increase in economic activities, especially in retail and hospitality sector, have been observed. The sheer presence and number of staff and students concentrated in the local area can contribute to the local economy (Parker & Williams, 2011). Employment opportunities have also increased in the local region as a result of having the institute in the region.

However, similar to findings from another empirical study (see Karlsen, Beseda, Sima, & Zyzak, 2017), Namal did not play a dynamic role in knowledge transfer, i.e. technological development, in the region as observed to be the case in Olomouc. There has been no case of any firm being relocated in the region, and only one start-up has been established. Peer and Penker (2016) emphasize that HEIs will not spur regional development autonomously; their impact on regional development depend on the regional absorptive capacity, the regional actors' willingness to cooperate, and other regional characteristics. In regions with thin regional innovation systems, the possibility for HEIs to engage directly in industry innovation projects is rather limited (Karlsen et al., 2017). In other words, the possibility for interaction between the institute and firms is limited in rural regions due to the limited number of local firms and their absorptive capacity (Cohen & Levinthal, 1990), which results in low student retention rate as indicated in the findings. Retaining staff members is a challenge too due to the lack of essential facilities, such as a hospital and high-quality schools for the children of staff members. Thus, the overall direct and indirect knowledge effect of the TNE, i.e. Namal College, has been low in the region. According to Steenhuis & Gray (2006), willingness from the industry and the government to partner is crucial for universities to improve their impact on regional development.

5.2. Stakeholders' perspective

5.2.1. "Leap frog from scratch"

The process of internationalization offers tools and methods to enhance the local national higher education system (Belarbi et al., 2016). International HEIs can lend their brand equity, offer their academic programs, and provide experienced faculty to teach, thus, Dubai, for instance, strategically recruits reputable TNEs to develop human capital for their new knowledge-based economy (Knight, 2011). In developing countries where cumbersome governance structures, bureaucratic management practices, and traditional institutional habits prevent established universities from being innovative, creating new universities may be the best approach (Salmi, 2011), provided that financial resources are not constraint, and it employs faculty that is not influenced by the culture of traditional universities. Namal College, in this regard, is an evidence of "real capacity-building" (UK Higher Education International & British Council, 2016). Although, the road is still long

for the institute to have significant impact on the regional economic or technological development, this model can be considered by other impoverished districts of Pakistan to enhance the human capital in the region which will lead to social and economic development eventually.

Kazakhstan is a country intent on applying this strategy as it seeks to make its economy less dependent on oil (Salmi, 2011). The government established a new international university, Nazarbayev University, in Astana in 2010, which follows an innovative multidisciplinary curriculum designed in cooperation with leading foreign universities (Nazarbayev University, n.d.). In the same vein, if the strategic approach of the Government of Pakistan is to enhance the quality of the higher education sector by building new institutions, collaborating with foreign providers is helpful as it speeds up the initial set up process and enables the institution to learn from the good practices of international established universities. It can attract outstanding faculty and high calibre students, and establish international networking opportunities for staff and students (Lien & Wang, 2010).

5.2.2. TNE: Not the Answer but a Stepping Stone

Traditionally, high-quality international education has been considered as studying abroad in the West (Ahmed & Buchanan, 2017), typically the United Kingdom or the United States. With the rapid expansion of transnational education, students in host countries are now provided with an option to earn a foreign degree at a lower cost than studying abroad (Lien & Wang, 2010). According to the Country Report conducted by QAA (2017) on UK TNE, Pakistani students clearly welcome the fact that they are receiving a UK qualification in Pakistan because they are attracted to the strong reputation of the UK higher education and the style of teaching and learning (QAA, 2017, p. 19). The findings of the study correspond to the study of university image by Alves and Raposo (2010) where the current image and the reputation of the university is more important than the quality because it is the perceived image that influences decisions made by prospective students, which explains the impressive representation of 53 districts at Namal College and the decline in the quantity and quality of student applications since the departure of

Bradford University. Nevertheless, students' view that teaching methods at the UK TNE, i.e. Namal College, rely more on critical thinking and voicing of opinions, which is reflected in Pieper and Beall's (2014) study as well.

Majority of the students at Namal College who initially did not even have the financial capacity to seek city-based education in their home country are now receiving a foreign degree either for free if they are eligible for merit or need-based scholarships or on a very low cost as compared to the degree cost at the parent institute. Tuition fees charged by institutions in countries such as the USA and the UK are relatively high, and so is the cost of living (Naidoo, 2009). For instance, the tuition fee for academic year 2018 – 19 at the University of Bradford is £14,950 (PKR 2,528,152) (University of Bradford, 2018), while the tuition fee for the same year at Namal College is £ 2,048 (PKR 346,500) (Namal, 2018).

The opportunities to broaden international outlook and strengthen intercultural competence were ranked highly by students as a motivation for choosing their TNE programme in a report by the British Council and DAAD (Pieper & Beall, 2014). However, as suggested in the research findings, the cultural experience of studying in a TNE programme may fall short of student expectations because most TNE programmes in developing countries, including Namal, appear to be mainly responding to demand absorption for HE. Nevertheless, findings indicate that the TNE, i.e. Namal College, facilitates students who wish to seek postgraduate opportunities abroad, which may also indicate that students have better chances to emigrate after graduating from TNE that may potentially exacerbate the brain drain problem (Lien & Wang, 2010). Knight (2003), on the contrary, argued that the brain drain problem can actually be alleviated by reducing the number of students studying abroad that can be effectively achieved if the quality of the branch campus is sufficiently high (Lien & Wang, 2010).

Thus, the quality of the TNEs invited into Pakistan should be taken into consideration as this can also impact students' employability because it is the competency acquired that enables students to become employable and not just a 'branded' degree certificate. This finding corresponds with another study that suggests that TNE may only be moderately

addressing skills gaps in the local labour market, depending on the type of programmes being offered (Pieper & Beall, 2014).

5.3. The Barriers

5.3.1. Funding

Shrinking resources and rising costs of higher education are some of the problem HEIs worldwide are facing as a result of the inability of students – particularly from lower socio-economic backgrounds – to afford the ever-increasing tuition and fees; and the massive spending needed to build and maintain libraries, classrooms and contemporary science and technology laboratories (Hayward & Ncayiyana, 2003). Hence, to raise the quality of higher education institution, a sufficient and assured funding source is vital besides the familiar requirement of well-prepared students, distinguished faculty, and appropriate facilities (Salmi, 2011). Financial concern has been raised multiple times by the faculty members of Namal College. Hosting a foreign provider requires paying high franchise fee, which can be covered by charging students high tuition fee, getting financial support from the government, and/or public, i.e. donations (Salmi, 2011). In the case of Namal, to charge students high tuition fee will be going against its mission of providing affordable higher education to youth from rural and lower socio-economic backgrounds, majority of whom are eligible for need-based fee waivers. Namal does not receive any financial support from the government either, thus leaving the last option of relying on public donations.

According to Lien and Wang (2010), there are only about 37 per cent of the institutes that fully fund their own branch campuses. A shift has taken place in the funding model of branch campuses, where the host country government provides facilities to attract foreign providers (Becker, 2010), which reduces the start-up funds required. However, this is not the case with Namal College. Therefore, Bradford charging Namal a high franchise fee has derailed the construction of infrastructure for the purpose of campus expansion. It was after the departure of Bradford University that Namal, in 2017, started the construction on the new Academic Block 1, which will serve as Pakistan's first Agribusiness School with the aim to transform the agricultural sector of Pakistan (Namal Knowledge City, 2017).

Bradford University's effort in contributing to Namal's development has been crucial and should be applauded for. Nevertheless, it must be noted that there is clearly a business consideration within Bradford's decision to collaborate with Namal. According to Hazelkorn (2015), a good university should focus on developing other universities and contribute in the improvement of other national education systems, but perhaps a truly world-class university could be less market-oriented and demonstrate generosity with their services too.

Moreover, despite the fact that Namal is sustaining on public donations, and that is likely due to Imran Khan's association with Namal, the need for the government to financially support higher education cannot be denied. Johnstone (2011) states that the state must continue to play the larger financial role in support of the higher education sector. This project, at the moment, appears to be Imran Khan's project, while from the researcher's perspective, this should be a national project and the government should be in the forefront; supporting it financially because it has the potential to serve as a pioneer knowledge oasis in the region if not the whole of Pakistan.

5.3.2. Relevance or Quality or Both?

Students deserve high quality educational experiences, and host countries need to ensure that graduates from these programmes are fulfilling the 'nation-building' objective that initially led them to welcome foreign education providers (McBurnie, 2008, p.193). On the other hand, for the exporting country, the results of poor quality can be both reputationally and financially detrimental (Smith, 2010). Therefore, it is essential that a regulatory framework that ensures the quality of TNEs is put in place (Smith, 2010). However, majority of the host countries do not have specific regulations in place for foreign providers (Verbik & Merkley, 2006), and Pakistan is one of them (QAA, 2017). Nonetheless, the importance of quality assurance of transnational education provision in Pakistan has been recognized by the HEC. Thus, together with the British Council in Pakistan, HEC is currently devising a legal framework to improve the quality and quantity of TNE provision in Pakistan (British Council Pakistan, 2018).

At this stage, the onus remains on the UK awarding body to maintain its academic standards and quality. Based on the findings, much of the curricula at Namal College remains identical, which is also supported by the Country Report conducted by QAA (2017). This, however, points toward the lack of ability of the TNE to reflect local priorities within the syllabus. According to Rosenfeld and Roth (2004 as cited in Peer & Penker, 2016), curriculum and research contents matching the actual needs of regional firms is considered a core element for knowledge production and exchange between universities and regional industries. However, since branch campuses typically “are small, specialized, and limited academic programs offered offshore to take advantage of a perceived market” (Altbach, 2010, p. 2), thus the extent to which a TNE managed in this way may only have a limited impact on the regional development. Establishing a real branch campus that provides an education the same as at the home institution is not an easy task, and sustaining it is even more difficult (Altbach, 2010). Hence, most popular programs offered are information technology and business management because they have a low setup cost but significant worldwide demand (Lien & Wang, 2010).

While there have been studies conducted previously looking into the issue of quality concern at branch campuses, the point on whether the curriculum in TNEs is relevant to national needs has not been discussed much. Is education considered of high quality only if students in both the home country and at the TNE are sitting for the same exams or the education that provides students with the knowledge and skills that makes them value-added citizens of their country? Universities involved in the internationalization of higher education ought to understand the local culture of higher education before collaborating because this is a reciprocal relationship in which both the local higher education system and the TNE providers depend on each other (Belarbi et al., 2016).

While the study did not specifically investigate internationalization of curriculum, it has highlighted issues regarding the relevance of curriculum in the TNE. In an empirical research conducted by Lim and team (2016), the use of localising examples helped students to avoid apprehension and confusion without compromising on the quality of the

foreign education programme. Besides assisting students in their learning, localising examples may also enable students to understand the local market dynamics since that is the target destination for majority of the students. The study also highlighted that equivalent student outcomes do not necessarily equate to equivalent learning experiences (Lim et al., 2016). Moreover, whether equivalence is more important or relevance, and whether a balance could be achieved between the two, are questions to be answered in future studies.

All in all, the HEC of Pakistan is seeking for partnerships with foreign providers at a faster pace than in-depth research is being conducted on the impact of TNEs. This is not to discredit HEC's efforts in enhancing the quantity and quality of the higher education sector in Pakistan, but they have to move forward more cautiously. Yogi Berra, an American baseball player once said: "You've got to be very careful if you don't know where you are going, because you might not get there."

6. Conclusion

Chapter Summary

Chapter 6 concludes the study with some recommendations. The limitations of the study are highlighted, and avenues for future research are also listed.

6.1. Conclusion

To encapsulate, some major objectives of host countries behind attracting foreign universities to set up branch campuses or conduct joint ventures with local HEIs are to meet local higher education demand through the provision of additional choices, expand local HE infrastructure, and increase domestic human capital (Lien & Wang, 2010), all of which may contribute to regional development. Namal College has been delivering UK TNE for a decade now. The findings indicate that the partnership with Bradford University has had both positive and negative impacts on the development of Namal College, which directly and indirectly influenced its impact on the regional development. Although, this collaboration was not planned, it is not considered a ‘mistake’ as it gave Namal College a head-start during its infancy years by providing it with the teaching resources, brand name, staff training, good pedagogical practices etc. Students from underprivileged, rural background benefited from the affordable international education, however, it did not necessarily help them to secure jobs. Nonetheless, this opportunity enabled some students to seek postgraduate opportunities abroad. The presence of the institute did stimulate economic activities, especially in the retail and hospitality sector, and it also led to social change through closer university-community ties, which created a sense of trust and awareness of the importance of higher education and provided access to previously disenfranchised group of students. However, the curriculum brought by the TNE is not the most effective solution for knowledge transfer as it is not responsive to the regional needs. In addition, the franchise cost associated with the TNE also slowed down the process of institutional advancement as Namal College is not funded by the Government of Pakistan, unlike TNEs in the Gulf States.

6.2. Implications for research

Although this research deals exclusively with the Pakistani case, the study laid down a foundation for further enquiry into the topic which was previously unexplored. The findings

can be of interest to a broader audience in developing countries in a time when transnational education is proliferating and higher education institutions in many countries are playing a crucial role in developing their regions.

The study is timely and topical for leaders in the higher education sector and policy-makers at the national and regional level to make informed decisions when it comes to using TNEs to enhance the quantity and quality of national higher education provision and using it as a tool for regional/national development. The study also serves as an additional source to the scarce literature on the transnational education landscape in Pakistan.

6.3. Recommendations

Namal College should try and place their pupils in their respective industries just as trainee doctors are placed in hospitals or novice teachers in schools. One term compulsory placement program for year 3 students in their respective home cities or cities closest to their home should be arranged. One of the main challenges would be to look for partnering firms, however the findings of the study indicate that there is a will from both the academia and the industry to bridge this gap. A ‘placement allocation’ or ‘field experience’ office could be set up with staff that is dedicated to strengthening Namal’s partnership with various industries and arranging student placements. Another suggestion is for Namal to diversify its funding sources. One way is to generate income from conducting contract research for public organizations or private firms.

6.4. Limitations

The conclusion of this exploratory study is limited in two ways. First major limitation of this research is epistemological in nature; it relates to the absence of the ‘voice’ of some of the concerned stakeholders, most notably that of policy-makers, thus it is difficult to establish a comprehensive narrative on the impact of TNE on regional development. However, this limitation is strictly a result of the ‘manageability’ aspect of the study given the constraints on time and word limit allocated for its completion. Second, this is a case study and therefore findings are most closely linked to the institution where the research was conducted, however,

the study has served to highlight some broader points about the nature of a TNE that can be most effective in supporting the regional development of its host area.

6.5. Suggestions for Further Research

It must be reiterated that this is an exploratory study that only claims to have scratched the surface of the subject of TNE and its impact on regional development in Pakistan. This research is not a major economic study of impact (e.g. value of expenditure, number of jobs created etc), but future empirical studies with such an emphasis would add value to the wider understanding of the research questions in this study. Moreover, due to space and time constraints, there are several areas that this project could not delve into. For instance, it would be important in a follow up study to engage with other ‘voices’, i.e. non-TNE faculty and students, public HEIs, higher education experts, government agencies, and policy-makers. Their inputs and insights would be most valuable to a comprehensive understanding of the TNE phenomenon and its impact on regional development. While the impact of transnational education on local higher education institutions is beyond the scope of this research, it is nonetheless an important aspect worthy of study; speculative articles have been produced by Mohamedbhai (2013), but there has been no empirical study conducted on this aspect yet.

References:

- Abbas, Q., & Peck, J. F. (2008). Human capital and economic growth: Pakistan, 1960–2003. *The Lahore Journal of Economics*, 13(1), 1–27.
- Acs, Z. J., Audretsch, D. B., & Feldman, M. P. (1991). Real Effects of Academic Research: Comment Real Effects of Academic Research: Comment. *The American Economic Review*, 82(1), 363–367.
- Ahmad, I., Rehman, K., Ali, A., Khan, I., & Khan, F. A. (2014). Critical Analysis of the Problems of Education in Pakistan : Possible Solutions. *International Journal of Evaluation and Research in Education*, 3(2), 79–84.
- Ahmad, S. Z. (2014). Evaluating student satisfaction of quality at international branch campuses. *Assessment & Evaluation in Higher Education* , 40(4), 488–507.
<https://doi.org/10.1080/02602938.2014.925082>
- Ahmed, S. Z., & Buchanan, F. R. (2017). Motivation factors in students decision to study at international branch campuses in Malaysia. *Studies in Higher Education*, 42(4), 651–668. <https://doi.org/10.1080/03075079.2015.1067604>
- Altbach, P. G. (2001). The Rise of Pseudouniversities. *International Higher Education*, 25, p. 2 – 3.
- Altbach, P. G. (2007). *Tradition and Transition : The International Imperative in Higher Education*. Rotterdam: Sense Publishers.
- Altbach, P. G., & Knight, J. (2007). The Internationalization of Higher Education: Motivations and Realities. *Journal of Studies in International Education*, 11, 290–305.
<https://doi.org/10.1177/1028315307303542>
- Altbach, P. G. (2010). Why Branch Campuses May be Unsustainable. *International Higher Education*. Retrieved from:
<https://ejournals.bc.edu/ojs/index.php/ihe/article/viewFile/8467/7601>
- Alves, H., & Raposo, M. (2010). The Influence of University Image on Student Behaviour. *International Journal of Educational Management*, 24(1): 73–85.
- Amjad, R. (2013). Why Has Pakistan Not Reaped Its Demographic Dividend? In Z. A. Sathar, R. Royan, & J. Bongaarts (Eds.), *Capturing the demographic dividend in Pakistan* (pp. 41 – 54). New York; Islamabad: The Population Council.
- Armstrong, S. & Batten, A. (2011). Issues and Overview. In S. Armstrong & B. Chapman (Eds.), *Financing Higher Education and Economic Development in East Asia* (pp. 1–16). ANU Press. Retrieved from <http://www.jstor.org/stable/j.ctt24h3c0.4>
- Aslam, M. (2009). Education Gender Gaps in Pakistan: Is the Labor Market to Blame? *Economic Development and Cultural Change*, 747–784.
- Auerbach, C. F., & Silverstein, L. B. (2003). *Qualitative Data: An Introduction to Coding and Analysis*. New York: NYU Press.
- Ball, S. J. (1990). *Politics and Policy Making in Education*. London: Routledge.

- Barro, R. (1997). *Determinants of economic growth: A cross-country empirical study*. Cambridge, Mass.; London: MIT Press.
- Bassey, M. (1999). *Case study research in educational settings*. Maidenhead: Open University Press.
- BBC (2014, 16 December). *Pakistan Taliban: Peshawar school attack leaves 141 dead*. Retrieved from: <https://www.bbc.co.uk/news/world-asia-30491435>
- Becker, R. (2010). International Branch Campuses: New Trends and Directions. *International Higher Education*. Retrieved from: <https://ejournals.bc.edu/ojs/index.php/ihe/article/view/8464/7598>
- Bekhradnia, B. (2007). *Evaluating and funding research through the proposed "Research Excellence Framework"*; Oxford.
- Belarbi, A. K., El-Refae, G. A., Ballard, J. A., & Abu-Rashed, J. (2016). Transnational education in the Gulf Cooperation Council countries: the challenges of internationalisation and quality in higher education. *International Journal Of Economics And Business Research*, 11(2), 120–131.
- Bloom, D. E. & Rosovsky, H. (2011). Unlocking the Benefits of Higher Education through Appropriate Governance. In P. G. Altbach (Ed.), *Leadership for World Class Universities: Challenges for Developing Countries* (pp. 70 – 89). New York; London: Routledge.
- Bohm, A., Davis, T., Meares, D., & Pearce, D. (2002). *Global Student Mobility 2025: Forecasts of the Global Demand for International Higher Education*. IDP Education Australia.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- British Council Pakistan (2018). *Internationalizing Higher Education*. Retrieved from: <https://www.britishcouncil.pk/programmes/education/higher-education>
- Castells, M. (2000). *The rise of the network society*. Oxford: Blackwells.
- Chatterton, P., & Goddard, J. (2000). The Response of Higher Education Institutions to Regional Needs. *European Journal of Education*, 35(4).
- Cheng, K. M. (2011). Fund-Raising as Institutional Advancement. In P. G. Altbach (Ed.), *Leadership for World Class Universities: Challenges for Developing Countries* (pp. 159 – 175). New York; London: Routledge.
- Cloete, N., Bailey, T. & Maassen, P. (2011). *Universities and Economic Development in Africa: pact, academic core, and coordination*. Wynberg, South Africa: Centre for Higher Education Transformation.
- Cohen, L., Manion, L. R., & Morrison, K. (2000). *Research methods in education* (5th ed.). New York, NY: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.).

London, England: Routledge.

- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Colclough, C., Kingdon, G., & Patrinos, H. (2009). The pattern of returns to education and its implications (Policy Brief, 4). Cambridge: University of Cambridge, Faculty of Education, Research Consortium on Educational Outcomes and Poverty (RECOUP). Retrieved from: https://www.ssoar.info/ssoar/bitstream/handle/document/6918/ssoar-2009-colclough_et_al-the_pattern_of_returns_to.pdf?sequence=1
- Cookson, P. W. (1994). The Power discourse: elite narratives and educational policy formation. In G. Walford. (Ed.). *Researching the powerful in education*. London: UCL Press
- Creswell, J.W. (2013). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*, 3rd ed., Pearson/Merrill Prentice Hall, Upper Saddle River, NJ.
- Cronbach, L. J. (1975). Beyond the Two Disciplines of Scientific Psychology. *American Psychology*, 30, 116 – 127.
- Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social Science Information*, 45(4), 483–499.
<https://doi.org/10.1177/0539018406069584>
- Curtis, P (2005, December 21). Bradford links up with Pakistan college. *The Guardian*. Retrieved from:
<https://www.theguardian.com/education/2005/dec/21/highereducation.internationaleducationnews>
- Embassy of France. (2017, October 17). *20 French universities touring Pakistan to reinforce higher education cooperation*. Retrieved from: <https://pk.ambafrance.org/20-French-universities-touring-Pakistan-to-reinforce-higher-education>
- Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: from National Systems and “Mode 2” to a Triple Helix of university–industry–government relations. *Research Policy*, 29(2), 109–123.
- Fender, V., & Calver, J. (2014). *Human Capital Estimates, 2013*.
- Flick, U. (2014). *An Introduction to Qualitative Research*. (5th ed.) London: SAGE Publications.
- Florax, R., & Folmer, H. (1992). Knowledge impacts of universities on industry: an aggregate simultaneous investment model. *Journal of Regional Science*, 32(4), 437–466.
- Florax, R. (1992). *The university: A regional booster? Economic impacts of academic knowledge infrastructure*. Aldershot: Avebury.
- Florida, R. (2002). The Economic Geography of Talent. *Annals of the Association of*

- American Geographers*, 92(4), 743–755. <https://doi.org/10.1111/1467-8306.00314>Freeman, I., & Thomas, M. (2005). Consumerism in education: A comparison between Canada and the United Kingdom. *The International Journal of Educational Management*, 19(2), 156–177.
- Garett, R. (2005). *Fraudulent, Sub-standard, Ambiguous: the alternative borderless higher education*. London: Observatory on Borderless Higher Education.
- Gillham, B. (2000). *The research interview*. London: Continuum.
- Goetz, J. P., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research*. Orlando: Academic Press.
- Goldfarb, B., & Henrekson, M. (2003). Bottom-up versus top-down policies towards the commercialization of university intellectual property. *Research Policy*, 32(4), 639–658.
- Government of Pakistan. (2017). *National Education Policy 2017 - 2025*. Islamabad.
- Gregorio, D. Di, & Shane, S. (2003). Why do some universities generate more start-ups than others? *Research Policy*, 32(2), 209–227.
- Halai, N. (2007). Making use of bilingual interview data: Some expressions from the field. *Qualitative Research Report*, 12(3), pp. 344 – 355.
- Hayward, F. D. (2009). Higher Education Transformation in Pakistan: Political and Economic Instability. *International Higher Education*, (54), 19–20.
- Hayward, F. M., & Ncayiyana, D. J. (2003). *A Guide to Strategic Planning for African Higher Education Institutions*. Cape Town, South Africa: Centre for Higher Education Transformation.
- Hazelkorn, E. (2015). *Rankings and the reshaping of higher education: The battle for world-class excellence* (2nd ed.). Basingstoke, England: Palgrave Macmillan.
- HESA. (2017, January 12). *Higher education student enrolments and qualifications obtained at higher education providers in the United Kingdom 2015/16*. Retrieved from: <https://www.hesa.ac.uk/news/12-01-2017/sfr242-student-enrolments-and-qualifications>
- Hiles, R. (2016, November 14). Focus on Asia. In *Universities UK*. Retrieved from: <http://www.universitiesuk.ac.uk/International/heglobal/Pages/focus-on-asia.aspx>
- Hoare, L. (2012). Transnational Student Voices: Reflections on a Second Chance. *Journal of Studies in International Education*, 16(3), 271–286. <https://doi.org/10.1177/1028315311398045>
- Huang, F. (2007). Internationalization of Higher Education in the Developing and Emerging Countries: A Focus on Transnational Higher Education in Asia. *Journal of Studies in International Education*, 11(3–4), 421–432. <https://doi.org/10.1177/1028315307303919>
- Isani, U. A., & Virk, M. L. (2003). *Higher education in Pakistan : a historical and futuristic perspective*. Islamabad: National Book Foundation.
- Isani, U. A., & Virk, M. L. (2010). *Dynamics of Higher Education in Pakistan: A Critical*

- Review*. Berlin: Lambert Academic Publishing.
- Jaffe, A. B. (1989). Real Effects of Academic Research. *The American Economic Review*, 79(5), 957–970.
- Jahangir, K. (2008). *Management of Higher Education Reforms in Pakistan : An Implementation Perspective*. Islamabad: National University of Modern Languages Press.
- Karlsen, J., Beseda, J., Sima, K., & Zyzak, B. (2017). Outsiders or Leaders? The Role of Higher Education Institutions in the Development of Peripheral Regions. *Higher Education Policy*, 30, 463–479. <https://doi.org/10.1057/s41307-017-0065-5>
- Khan, I. (n.d.). Chairman’s Message. Retrieved November 26, 2017, from <https://www.namal.edu.pk/chairman-message/>
- Kinser, K. & Lane, J. (2010). Deciphering ‘Educational Hubs’ Strategies: Rhetoric and Reality. *International Higher Education*, 59, 18–19.
- Knight, J. (2003a). *GATS , Trade and Higher Education Perspective 2003 - Where are we ? The Observatory on Borderless Higher Education*. London.
- Knight, J. (2003b). Updating the Definition of Internationalization. *International Higher Education*, 33, 2–3.
- Knight, J. (2011). Education Hubs: A Fad, a Brand, an Innovation? *Journal of Studies in International Education*, 15(3), 221–240. <https://doi.org/10.1177/1028315311398046>
- Lane, J. (2011). Global Expansion of International Branch Campuses: Managerial and Leadership Challenges. In J. Lane & K. Kinser (Eds). *Multinational Colleges and Universities: Leading, Governing, and Managing International Branch Campuses*, San Francisco, CA: Jossey-Bass.
- Lee, M. N. N. (2004). Malaysian universities: Towards equality, accessibility and equality. In P. G. Altbach & T. Umakoshi (Eds.), *Asian Universities* (pp. 221 – 246). Baltimore: The Johns Hopkins University Press.
- Leydesdorff, L., & Etzkowitz, H. (1996). Emergence of a Triple Helix of university-industry-government relations. *Science and Public Policy*, 23(5), 279–286.
- Leydesdorff, L., & Etzkowitz, H. (1998). The Triple Helix as a model for innovation studies. *Science and Public Policy*, 25(3), 195–203.
- Lien, D., & Wang, Y. (2010). The effects of a branch campus. *Education Economics* , 20(4), 386–401. <https://doi.org/10.1080/09645292.2010.488488>
- Lim, C. B., Bentley, D., Henderson, F., Pan, S. Y., Balakrishnan, V. D., Balasingam, D. M., & Teh, Y. Y. (2016). Equivalent or not?: Beyond measuring teaching and learning standards in a transnational education environment. *Quality Assurance in Education*, 24(4), 528–540. <https://doi.org/10.1108/QAE-01-2016-0001>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

- Link, A. N., & Rees, J. (1990). Firm Size, University Based Research, and the Returns to R&D. *Small Business Economics*, 2(1), 25–32.
- Link, A. N., & Scott, J. T. (2006). U.S. university research parks. *Journal of Productivity Analysis*, 25(2), 43–55. <https://doi.org/10.1007/s11123-006-7126-x>
- Maringe, F., & Gibbs, P. (2009). *Marketing higher education : theory and practice*. McGraw Hill.
- McBurnie, G. (2008). Quality assurance for transnational education: International, national and institutional approaches. In L. Dunn & M. Wallace (Eds), *Teaching in Transnational Education: Enhancing Learning for Offshore International Students* (pp. 193–203). London: Routledge.
- McGettigan, A. (2013). *The great university gamble : money, markets and the future of higher education*. PlutoPress.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass.
- Mohamedbhai, G. (2013, March 24). Transnational Education: What impact on local institutions? *Inside Higher Ed*. Retrieved from: <https://www.insidehighered.com/blogs/world-view/transnational-education-what-impact-local-institutions>
- Naidoo, R. (2003). Repositioning higher education as a global commodity: Opportunities and challenges for future sociology of education work. *British Journal of Sociology of Education*, 24, 249 – 259.
- Naidoo, V. (2009). Transnational Higher Education: A Stock Take of Current Activity. *Journal of Studies in International Education*, 13 (3), 310–30.
- Namal. (n.d.-a). Affiliation with University of Bradford. Retrieved November 26, 2017, from <https://www.namal.edu.pk/affiliation-with-bradford-2/>
- Namal. (n.d.-b). Faculty. Retrieved July 29, 2018, from <https://www.namal.edu.pk/faculty/>
- Namal. (n.d.-c). Namal History. Retrieved November 26, 2017, from <https://www.namal.edu.pk/namal-history/>
- Namal. (n.d.-d). Vision and Mission. Retrieved November 26, 2017, from <https://www.namal.edu.pk/vision-mission/>
- Namal. (2018). Fee Structure 2018-19. Retrieved July 27, 2018, from <https://www.namal.edu.pk/fee-structure/>
- Namal Knowledge City. (n.d.). What is Namal Knowledge City. Retrieved August 3, 2018, from <https://www.namalknowledgecity.com/>
- Namal Knowledge City. (2017). Academic Block 1. Retrieved July 29, 2018, from <https://www.namalknowledgecity.com/projects/academic-block-1>
- National Association of State Universities and Land-Grant Colleges. (1997). *Value Added:*

- The Economic Impact of Public Universities*. Washington D.C.: NASULGC.
- National Association of State Universities and Land-Grant Colleges. (2001). *Shaping the Future: The Economic Impact of Public Universities*. Washington D.C.: NASULGC.
- Nazarbayev University. (n.d.). About Us. Retrieved August 3, 2018, from <https://nu.edu.kz/about-nazarbayev-university>
- Nazir, M. (2010). Democracy and education in Pakistan. *Educational Review*, 62(3), 329–342. <https://doi.org/10.1080/00131911.2010.503604>
- Nazroo, J. Y. (2006). *Health and Social Research in Multiethnic Societies*. London: Routledge.
- NEMIS. (2017). *Pakistan Education Statistics 2015 – 2016*. Retrieved February 17, 2018, from: <http://library.aepam.edu.pk/Books/Pakistan%20Education%20Statistics%202015-16.pdf>
- NUST. (n.d.). Technology Incubation Centre (TIC). Retrieved July 6, 2018, from http://www.nust.edu.pk/INSTITUTIONS/Directortes/TIC/ABOUT_US/Pages/Welcome-to-TIC.aspx
- NUST. (2017a). Another Technology Incubation Centre NUST Startup Making Global Waves. Retrieved July 6, 2018, from <http://www.nust.edu.pk/INSTITUTIONS/Directortes/TIC/News/Pages/ANOTHER-TECHNOLOGY-INCUBATION-CENTRE-NUST-STARTUP-MAKING-GLOBAL-WAVES.aspx>
- NUST. (2017b). Ranking by QS (World Universities). Retrieved July 6, 2018, from <http://www.nust.edu.pk/QA/Ranking/Pages/QS-World-Ranking.aspx>
- NUST. (2017c). TIC INCUBATEE WINS SUSTAINABLE DEVELOPMENT GOALS (SDG) CHALLENGE CUP 2017. Retrieved July 6, 2018, from [http://www.nust.edu.pk/INSTITUTIONS/Directortes/TIC/News/Pages/TIC-INCUBATEE,-WINS-SUSTAINABLE-DEVELOPMENT-GOALS-\(SDG\)-CHALLENGE-CUP-2017.aspx](http://www.nust.edu.pk/INSTITUTIONS/Directortes/TIC/News/Pages/TIC-INCUBATEE,-WINS-SUSTAINABLE-DEVELOPMENT-GOALS-(SDG)-CHALLENGE-CUP-2017.aspx)
- NUST. (2017d). TIC Startup DealSmash Raises 150,000 USD. Retrieved July 6, 2018, from <http://www.nust.edu.pk/INSTITUTIONS/Directortes/TIC/News/Pages/TIC-Startup-DealSmash-Raises-150,000-USD.aspx>
- NUST. (2017e). TIC Startup qualified for IBM to Global Entrepreneurship Program. Retrieved July 6, 2018, from <http://www.nust.edu.pk/INSTITUTIONS/Directortes/TIC/News/Pages/TIC-Startup-qualified-forIBM-to-Global-Entrepreneurship-Program.aspx>
- Oketch, M., Mccowan, T., & Schendel, R. (2014). *The Impact of Tertiary Education on Development: A Rigorous Literature Review*. London.
- Organization for Economic Cooperation and Development (OECD) (2004). Internationalization and trade in higher education: Opportunities and Challenges. Paris: OECD.

- O'Toole, J., & Beckett, D. (2013). *Educational research: creative thinking and doing* (2nd ed.). South Melbourne, Victoria: Oxford University Press.
- Overland, M. A. (2006, July 28). Singapore Will Shut Down Johns Hopkins Biomedical Center That Didn't Meet Expectations. *The Chronicle of Higher Education*. Retrieved from: <https://www.chronicle.com/article/Singapore-Will-Shut-Down-Johns/119512>
- Parker, D. D. & Zilberman, D. (1993). University technology transfers: impacts on local and U.S. economies. *Contemporary Policy Issues*, 11, 87 – 99.
- Parker, L., & Williams, R. (2011). Higher education and regional transformation in the UK: Social and cultural perspectives. *Journal of Adult and Continuing Education*, 17(1), 130–146.
- Patton, M. Q. (1980). *Qualitative Evaluation Methods*. Newbury Park, CA.: Sage.
- Peer, V., & Penker, M. (2016). Higher Education Institutions and Regional Development: A Meta-analysis. *International Regional Science Review*, 39(2), 228–253. <https://doi.org/10.1177/0160017614531145>
- Pieper, A., & Beall, J. (2014). *Impacts of transnational education on host countries: academic, cultural, economic and skills impacts and implications of programme and provider mobility*.
- Premus, R. (2003). University knowledge production and industrial innovation: the evidence. *International Journal of Technology Transfer and Commercialization*, 2(3), 263 – 273.
- Pseiridis, A., Lianos, T. P., & Agiomirgianakis, G. (2016). Is University Education an Investment or a Consumption Good?
- QAA. (2017). *COUNTRY REPORT: The Islamic Republic of Pakistan*.
- Reynolds, P.D., Bygrave, W.D. & Autio, E. (2003). *Global Entrepreneur Monitor 2003 Executive Report*. Babson Park, MA: Babson College; London: London Business School. Retrieved from: file:///C:/Users/user/Documents/Oxford_MScEd/Edu%20Dept/Thesis/GEM_2003_Global_Report.pdf
- Roberts, C. (1997). Transcribing talk: Issues of representation. *TESOL Quarterly*, 31, 167–172.
- Rubin, H. J. & Rubin, I. (2012). *Qualitative interviewing: The art of hearing data*. (3rd ed.). Thousand Oaks: Sage Publications.
- Salmi, J. (2011). The Challenge of Establishing World-Class Research Universities in Developing Countries. In P. G. Altbach (Ed.), *Leadership for World Class Universities: Challenges for Developing Countries* (pp. 224 – 240). New York; London: Routledge.
- Schultz, L. (2012). University Industry Government Collaboration for Economic Growth. In J. Lane and B. Johnstone (Eds.), *Universities and Colleges as Economic Drivers: Measuring Higher Education's Role in Economic Development* (pp. 129 – 162). Albany: SUNY Press

- Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51(1), 1–17.
- SETsquared. (2003). The SETsquared Partnership. Retrieved August 2, 2018, from <http://www.setsquared.co.uk/setsquared-partnership>
- Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi method for graduate research. *Journal of Information Technology Education*, 6(1), 1-21.
- Slaughter, S. & Leslie, L. (1997). *Academic Capitalism: Politics, Policy and the Entrepreneurial University*. Baltimore, Maryland: The Johns Hopkins University Press
- Smith, K. (2010). Assuring quality in transnational higher education: a matter of collaboration or control? *Studies in Higher Education* , 35(7), 793–806.
<https://doi.org/10.1080/03075070903340559>
<https://doi.org/10.1080/03075070903340559>
- Steenhuis, H.-J., & Gray, D. O. (2006). The university as the engine of growth: an analysis of how universities can contribute to the economy. *International Journal Of Technology Transfer And Commercialisation*, 5(4), 421–432.
- Syed, A. H. A. (2018, April 7). The dynamics of transnational higher education in Pakistan. *The News*. Retrieved from: <https://www.thenews.com.pk/print/301530-the-dynamics-of-transnational-higher-education-in-pakistan>
- Task Force on Higher Education and Society. (2000). *Higher Education in Developing Countries: Peril and Problems*. Washington, DC.
- Thanki, R. (1999). How do we know the value of higher education to regional development? *Regional Studies*, 33(1), 84–89.
- Tornatzky, L.G., Gray, D. O., Tarant, S. A. & Howe, J. E. (1998). *Where have all the students gone? Interstate migration of recent science and engineering graduates: A benchmarking report of the Southern Technology Council*. Research Triangle Park, NC: Southern Growth Policies Board.
- Tornatzky, L.G., Gray, D. O., Tarant, S. A. & Zimmer, C. (2001). *Who will stay and who will leave? Individual, institutional and state-level predictors of state retention of recent science and engineering graduates*. Research Triangle Park, NC: Southern Growth Policies Board.
- Tornatzky, L.G., Waugaman, P. G. & Gray, D. O. (2002). *Innovation U.: New University Roles in a Knowledge Economy*. Research Triangle Park, NC: Southern Growth Policies Board.
- Tribune (2018, June 22a). Austria, Pakistan plan joint venture educational institute. *The Express Tribune*. Retrieved from: <https://tribune.com.pk/story/1739637/1-austria-pakistan-plan-joint-venture-educational-institute/>
- Tribune. (2018, June 22b). NUST announces technology park, medical devices centre. *The Express Tribune*. Retrieved from: <https://tribune.com.pk/story/1739646/1-nust-announces-technology-park-medical-devices-centre/>

- UK Higher Education International, & British Council. (2016). *The Scale and Scope of UK Higher Education Transnational Education*.
- United Nations Educational, Scientific and Cultural Organization (UNESCO)/ Council of Europe. (2001). *Code of Good Practice in the Provision of Transnational Education*. Retrieved from: https://www.coe.int/t/dg4/highereducation/recognition/Code%20of%20good%20practice_EN.asp
- Universities UK. (2015). *The funding environment for universities 2015 - The economic role of UK universities*. London.
- University of Bradford. (2018). Tuition fees for undergraduate international students. Retrieved July 27, 2018, from <https://www.bradford.ac.uk/money/fees/undergraduate-international-students/>
- Uyarra, E. (2010). Conceptualizing the Regional Roles of Universities, Implications and Contradictions. *European Planning Studies*, 18(8), 1227–1246. <https://doi.org/10.1080/09654311003791275>
- Varga, A. (1998). *University Research and Regional Innovation: a Spatial Econometric Analysis of Academic Technology Transfers*. Dordrecht: Kluwer Academic Publishers.
- Verbik, L., & Lasanowski, V. (2007). International Student Mobility: Patterns and Trends. *The Observatory on Borderless Higher Education*. Retrieved from: http://www.obhe.ac.uk/documents/view_details?id=14
- Verbik, L., & Merkle, C. (2006). *The International Branch Campus - Models and Trends. The Observatory on Borderless Higher Education*.
- Vignoli, G. (2004). *What is Transnational Education*. Retrieved from: http://www.cimea.it/files/fileusers/5592_2004-What%20is%20transnational%20education.pdf
- Welch, A. (2011). Challenge and change in Southeast Asian education in the global era. In A. Welch (Ed.), *Higher Education in Southeast Asia: Blurring Borders, Changing balance* (pp. 1-20). New York, NY.: Routledge.
- White, M. (2003, 8 December). Mugabe quits Commonwealth. *The Guardian*. Retrieved from: <https://www.theguardian.com/world/2003/dec/08/zimbabwe.politics>
- Wilkins, S., Balakrishnan, M. S., & Huisman, J. (2012). Student Choice in Higher Education: Motivations for Choosing to Study at an International Branch Campus. *Journal of Studies in International Education*, 16(5), 413 – 33.
- Winter, S. G. (1984). Schumpeterian competition in alternative technological regimes. *Economic Behaviour and Organization*, 5(3), 287–320.
- Wolfe, B.L. & Haveman, R. H. (2002). *Social and Nonmarket Benefits from Education in an Advanced Economy*. Retrieved from: file:///C:/Users/user/Documents/Oxford_MScEd/Edu%20Dept/Thesis/Wolfe%20BL%20Haveman%20RH%202002Social%20and%20Nonmarket%20Benefits%20from%20Ed

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Appendices:

Appendix A: Interview Guideline

1. Interview Schedule with Namal Faculty/ Administrative Staff

1.1. Introductory Stage

- 1.1.1. Greeting
- 1.1.2. Self-introduction: MSc candidate in Higher Education at Oxford
- 1.1.3. Research Purpose and methodology
- 1.1.4. Confidentiality and anonymity
- 1.1.5. Audio recording permission
- 1.1.6. Sign the consent form

1.2. Main Interview Questions

Recruitment:

- 1.1.1. What strategies are employed in student recruitment?
- 1.1.2. To what extent does the brand name of the University of Bradford add advertisement value to Namal? (Is the brand name helpful in student recruitment?)
- 1.1.3. How effective is the student recruitment from local region? (How many students are recruited from this region?)
- 1.1.4. Are there any widening access programs adopted by the university?
- 1.1.5. Does Namal have any collaboration with schools in nearby villages?

University-Industry relations:

- 1.1.6. Can you give me examples of employment opportunities created and income generated for locals due to the presence of the university, its staff and students?
- 1.1.7. Has research in the university led to the creation of new products? Any example?
- 1.1.8. Are there any start-ups in the region by Namalites?
- 1.1.9. Has any firm relocate in the region to take advantage of the new talent?

Internationalization:

- 1.1.10. What does transnational education mean to you? (Does it provide a fast track to brand name/ readymade curriculum/ training?)
- 1.1.11. It is generally agreed that the intention of transnational universities is to make money. How is Namal, branch campus of Bradford University, different?
- 1.1.12. Why are you using transnational program?
- 1.1.13. Why Bradford instead of a local established university?
- 1.1.14. Is it worthwhile to cooperate with an international HE institution than a local leading institution?
- 1.1.15. Are there any student-teacher exchange programs between Namal and Bradford?
- 1.1.16. How is a degree from Bradford University perceived in Pakistan by employers?

University – Government relation:

- 1.1.17. How supportive is the regional government body to the development of Namal?

1.1.18. How much financial support does Namal receive from the government?

Retaining talent:

1.1.19. What type of students does Namal attract (i.e. the demographic of students/ diversity)?

1.1.20. What strategies are employed in retaining students/ staff in the region?

1.1.21. Can you elaborate on the function of scholarship/ sponsorship scheme and their criteria?

Future development strategies:

1.1.22. What are the future development strategies/ goals for the university?

1.1.23. Are there any forms of third-mission activities that Namal College has organized in the region? (e.g. Public lectures, museums or galleries open for public, environmental awareness campaigns etc.)

1.1.24. What are the characteristics/features Namal Knowledge City?

1.3. Summary and Closure

1.3.1. While concluding, remind the interviewees again about the purpose of the research study. Ask if they would like to make any additional comments before ending the interview.

2. Interview Schedule with Students

2.1. Introductory Stage

2.1.1. Greeting

2.1.2. Self-introduction: MSc candidate in Higher Education at Oxford

2.1.3. Research Purpose and methodology

2.1.4. Confidentiality and anonymity

2.1.5. Audio recording permission

2.1.6. Sign the consent form

2.2. Main Research Questions

2.2.1. Why did you choose Namal? Can you list 3 reasons?

2.2.2. Describe your student life at Namal College (i.e. extra curriculums, teacher-student relationship, curriculum, international exposure).

2.2.3. Have you participated in the exchange program between Namal and Bradford? How does that affect your learning?

2.2.4. What is your view about the difference in teaching methods in TNE programs and local programmes?

2.2.5. Do you think you would get similar employment opportunities if you were not a Namalite? Why?

2.2.6. What is your perception of Higher Education?

2.2.7. Do you consider HE essential for socio-economic mobility?

2.2.8. How does your family or extended family perceive your decision to seek higher education? (i.e. Has there been a positive educational awareness in your family or the region you are from?)

- 2.2.9. How are you financing your education at Namal? (i.e. Self-financed or Funded by the institute)
- 2.2.10. For students on scholarship: How much are you being sponsored? What conditions do you have to fulfil to be eligible for a scholarship? Would you have pursued further education without this funding?
- 2.2.11. How do you intend to contribute as a student and after your graduation?
- 2.2.12. Do you plan to progress to postgraduate studies?
- 2.2.13. Have you applied for any jobs yet? (Have received any offers?)

2.3. Summary and Closure

- 2.3.1. While concluding, remind the interviewees again about the purpose of the research study. Ask if they would like to make any additional comments before ending the interview.

3. Interview Schedule with Employers

3.1. Introductory Stage

- 3.1.1. Greeting
- 3.1.2. Self-introduction: MSc candidate in Higher Education at Oxford
- 3.1.3. Research Purpose and methodology
- 3.1.4. Confidentiality and anonymity
- 3.1.5. Audio recording permission
- 3.1.6. Sign the consent form

3.2. Main Research Questions

- 3.2.1. What company do you represent?
- 3.2.2. Why did you come to Namal today?
- 3.2.3. Has your company recruited employees from Namal in previous years? How many?
- 3.2.4. What are some of the qualities you as an employer look for in an employee?
- 3.2.5. Are you willing to get into a long-term collaboration with academia or this institute in particular?
- 3.2.6. Does your firm offer internship opportunities or placement offers for tertiary students?
- 3.2.7. How do you perceive the degree from Bradford University?

3.3. Summary and Closure

- 3.3.1. While concluding, remind the interviewees again about the purpose of the research study. Ask if they would like to make any additional comments before ending the interview.

Appendix B: CUREC Approval

Dear [REDACTED]

Title and reference number:

Transnational Education and Regional Development: A case study of Namal College,
Mianwali, Pakistan

Reference ED-CIA-18-119

The above application has now been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

If your research involves participants whose ability to give free and informed consent is in question (this includes those under 18 and vulnerable adults), then it is advisable to read the following NSPCC professional reporting requirements for cases of suspected abuse http://www.nspcc.org.uk/Inform/research/questions/reporting_child_abuse_wda74908.html

Should there be any subsequent changes to the project which raise ethical issues not covered in the original application you should submit details to research.office@education.ox.ac.uk for consideration.

Good luck with your research study.

Yours sincerely,
Charles Hulme

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Appendix C: Participant Information Sheet

UNIVERSITY OF OXFORD

DEPARTMENT OF EDUCATION

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www.education.ox.ac.uk

Director Professor John Furlong



Transnational Education and Regional Development: A case study of Namal College, Mianwali, Pakistan

Information for Participants

Invitation

You are being invited to take part in a research study. Before you decide to participate, it is important to understand why the research is being conducted and what your participation entails. Please take time to read the following information carefully. Please ask if there are any aspects of the project that are unclear or if you would like more information. Take time to decide whether or not you would like to take part in this research.

What is the purpose of the study?

The research is a case study on Namal College that investigates transnational higher education in Pakistan and its role in developing rural regions. The study seeks to understand the role of TNE, i.e. Namal College from different perspectives, including students and faculty, and identify the barriers of the TNE on the regional development.

Why have I been chosen?

You have been identified as someone with insight into the relevant subject matter. The hope is that by interviewing the key stakeholders in the internationalized tertiary institution in rural Pakistan, i.e. faculty, students, administrative staff members, and employers, the fullest possible picture of the impact of transnational higher education on the regional development can be explored.

Do I have to take part? What are the risks and benefits of taking part?

It is your decision to take part in this study. You can decide to stop participating at any time. You do not need to answer questions that you do not wish to. Every effort will be made to preserve confidentiality but as this cannot be fully guaranteed by the nature of this research it is possible that you may be able to be identified in the final report. Other than this, there are no known risks to taking part. Your participation, as part of this study, will benefit those trying to understand the impact of transnational higher education on the regional development, and the effectiveness of Namal College in achieving its policy objective, which will better inform their future policy-making and institutional development strategies.

What will happen to the results of this research?

The results of this research will form the basis of an Oxford postgraduate dissertation. Some results may be published in academic journals concerned with exploring educational policy. If

you wish to obtain a copy of the published results, please inform the researcher. The study will take place over the next three to four months after which the published results will be publicly available.

Who is funding and organizing the research?

The research is funded and organized as an independent postgraduate research project in conjunction with the Department of Educational Studies, Oxford University.

Contact for Further Information or Follow-up

Should you have any further questions about this research, please feel free to contact: [REDACTED]
[REDACTED], Department of Education, 15 Norham Gardens, Oxford, UK OX2 6PY.
[REDACTED]. Your inquiries are most welcome.

Appendix D: Consent Form

UNIVERSITY OF OXFORD

DEPARTMENT OF EDUCATION

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general.enquiries@education.ox.ac.uk
www.education.ox.ac.uk
Director Professor John Furlong



Research Consent Form

Project Title: Transnational Education and Regional Development: A case study of Namal College, Mianwali, Pakistan

Researcher: [REDACTED]

Declaration of Consent: I have read the participant information sheet and have had the opportunity to ask questions about the study and receive satisfactory answers to questions.

I understand that I may withdraw from the study without penalty at any time by advising the researchers, and any data already recorded will be discarded

I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford's Central University Research Ethics Committee

I understand that my personal data will be treated in total confidence, kept securely in a password-controlled server; and what will happen to the data at the end of the project

I understand that I will have the opportunity to review and comment on any analysis before publication.

I understand how to raise a concern and make a complaint, and agree to participate in this study

<p><input type="checkbox"/> I agree to voluntarily take part in this interview</p> <p><input type="checkbox"/> I confirm that I have read the associated information sheet and understand the intent and purpose of this research.</p> <p><input type="checkbox"/> I agree that data captured by this research can be shared among the research team on this project.</p> <p>Name of Participant: _____ Email: _____</p> <p>Signature: _____ Date: _____</p> <p>Name of Researcher _____ Signature and Date: _____</p>
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Appendix E: Table 3**Table 3.***Student financial support record – 2017 – 18 cohort*

Categories	2017-18		Year - 4
	Tuition Fee Waive Off (%)	Tuition Fee Payable (Rs.)	Number of Students (2017-18)
Merit Scholarship	100%	0	4
C1	100%	0	36
C2	90%	33,000	4
C3	80%	66,000	9
C4	70%	99,000	6
C5	60%	132,000	1
C6	50%	165,000	3
C7	40%	198,000	0
C8	30%	231,000	0
C9	20%	264,000	0
C10	10%	297,000	0
C11	0%	330,000	0
Full Fee	0%	330,000	1
Non-Category			9
Repeater			3
Total			76

Source: Namal College, 2018