



Assessing the Influence of External Environment
Factors on Higher Education Sector through Means-
end Theory of Decision Making:
The Case of Bahrain

A thesis submitted for the degree of Doctor of Philosophy

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Abstract

Higher education domain has a direct impact on individuals and society in general and particularly regarding the socio-economic status and economic growth of any individual or a country. Despite recent changes in job market orientation for hiring employees without higher education degrees, higher education sector is required globally to provide training, knowledge and skill to achieve the globally stated goal of attaining economic growth and sustainable human development. This research focuses on the importance of higher education to primary beneficiaries (student, parents, and higher education institutions personals), explores defined goal of higher education, and assess the effect of external environmental factors that influence higher education sector sampling Bahrain public higher education in a single case study.

Through an exploratory qualitative research, the researcher used a case study approach with semi-structured interviews to assess different beneficiaries' views of the importance of higher education to bridge the gap between different perspectives on shaping the goal of higher education. An abductive approach was followed to conduct this research as this topic requires both observing the research topic as well as qualifying an established theory. This approach allowed the researcher to gain new insights to understand the relationship between the environmental factors and higher education goal.

The research assesses the factors influencing higher education to be utilised as moderator to develop a conceptual framework based on Means-end theory of decision-making combined with the dynamics of OODA Loop (Observe, Orient, Decide, and Act) model of decision-making. Key findings of the pilot study conducted in one of Bahrain's public higher education institutions (HEIs) and another case study on one of the leading higher education institutions in Bahrain revealed a gap between higher education beneficiaries' perspectives on higher education and demonstrated the importance of the revision of the overall structure and implementation of policies concerning higher education sector in Bahrain.

Empirical findings highlighted some main areas where there is a huge gap between what is planned and implemented. Through comparing results of previous studies, the researcher concluded that each environment has its own effect on higher education goal definition which in turn affect the attainment of higher education benefits and the definition of its attributes.

Key words: Higher education (HE), Means-end theory, OODA loop, HE goals, HE benefits, HE attributes, HE environment.

Declaration

I hereby declare that the ideas, findings, analysis, results, and conclusions presented in this thesis are entirely my own work and have not been the subject of submission in any other academic institution. I also confirm that the researches and papers used have been properly referenced.

The thesis conforms to Brunel University Code of Ethics (CoE) issued on 14th May 2013 and revised on revised on 9th December 2014 that aims to balance between safeguarding the dignity and rights of the research participant and providing a supportive and protective ethical environment.

Some of the material displayed herein has already been discussed in the form of the following forms:

Mohamed, A., Irani, Z., and Kamal, M., (2017) “*Evaluating the Performance of Higher Education Institutions: Means-End Theory Approach*” British Academy of Management Conference (BAM 2017).

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Dedication

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Table of Contents

Abstract.....	I
Declaration.....	III
Acknowledgement	IV
Dedication.....	V
Table of Contents.....	VI
List of Figures.....	X
List of Tables	XI
CHAPTER ONE-RESEARCH INTRODUCTION.....	1
1.1 Introduction.....	1
1.2 Research Background and Context.....	2
1.3 Research Problem	4
1.4 Research Aim and Objectives.....	6
1.5 Research Questions.....	7
1.6 Research Approach.....	8
1.7 Thesis Outline	8
1.8 Research Structure Plan	11
1.9 Chapter Summary	12
CHAPTER TWO- LITRATURE REVIEW	13
2.1 Introduction.....	13
2.2 Research Context and Rationale	13
2.2.1 Background to the Higher Education Institutions in Bahrain	16
2.2.2 Public Higher Education Institutions	18
2.2.3 Private Higher Education Institutions	19
2.3 Higher Education Sector	20
2.3.1 Importance of Higher Education	20
2.3.2 Goals of Higher Education.....	23
2.3.3 Factors Affecting Higher Education.....	26
2.4 Strategic Analysis Models	30
2.4.1 SWOT Analysis Model.....	30
2.4.2 The PESTLE Analysis Model.....	32
2.4.3 Value Chain Model.....	35
2.4.4 Analysis Tools Comparison	37
2.5 Decision-Making Assessment Theories.....	39
2.5.1 Means-End Theory	40
2.5.2 OODA Loop Theory.....	42

2.5.3 <i>Simon's Decision Approach</i>	44
2.6 Literature's Gap	47
2.7 Chapter Summary	48
CHAPTER THREE-CONCEPTUAL FRAMEWORK AND RESEARCH PROPOSITIONS	
3.1 Introduction.....	50
3.2 Conceptual Framework Development	51
3.3 Conceptual Framework Application in Higher Education.....	51
3.4 Higher Education Environment's External Assessment	56
3.4.1 <i>Demographic factors</i>	56
3.4.2 <i>Infrastructure factor</i>	57
3.4.3 <i>Cultural factor</i>	58
3.4.4 <i>Economic Assessment</i>	59
3.4.5 <i>Regulatory Assessment</i>	60
3.5 Contribution of the Framework	61
3.6 Chapter Summary	64
CHAPTER FOUR-RESEARCH METHODOLOGY	
4.1 Introduction.....	65
4.2 Research Philosophical Perspectives	66
4.2.1 <i>Positivism</i>	67
4.2.2 <i>Interpretive</i>	68
4.2.3 <i>Realism</i>	68
4.2.4 <i>Pragmatism</i>	70
4.2.5 <i>Rationale for Adopting the Pragmatist Philosophy</i>	71
4.3 Research Approach	72
4.3.1 <i>The Deductive Approach</i>	72
4.3.2 <i>The Inductive Approach</i>	73
4.3.3 <i>The Rationale for Adopting a Combined Approach</i>	74
4.4 Research Strategy	75
4.4.1 <i>A Single Case vs multiple case Strategy</i>	77
4.4.2 <i>Rationale for adopting the Single Case Study Strategy</i>	78
4.5 Research Method	79
4.5.1 <i>Qualitative Method</i>	79
4.5.2 <i>The Quantitative Method</i>	80
4.5.3 <i>The rationale for adopting the qualitative method</i>	81
4.6 Cross sectional Time Horizon.....	82
4.7 Research design	83

4.8 Empirical Research Methodology.....	85
4.8.1 Data Collection.....	85
4.8.2 Data Analysis	88
4.8.3 Case Study Protocol.....	89
4.8.4 Case Study Questions.....	90
4.9 Chapter Summary	91
CHAPTER FIVE-PILOT STUDY FINDINGS AND ANALYSIS.....	93
5.1 Introduction.....	93
5.2 Case one (pilot) HEI-X	94
5.3 Findings and Analysis.....	95
5.3.1 Higher Education’s Importance, Structure, and Evaluation.....	95
5.3.2 The Effect of the External Environment on Higher Education’s Goal.....	99
5.3.3 The influence of the goal on the attributes of the HEIs.....	109
5.3.4 The relationship between the attributes and benefits of higher education ...	115
5.3.5 Higher Education’s Benefits	119
5.3 Pilot Study Key Finding	122
5.4 Chapter Summary	124
CHAPTER SIX-CASE STUDY FINDINGS AND ANALYSIS	125
6.1 Introduction.....	125
6.2 Case two (main) HEI-Y	126
6.3 Findings and Analysis.....	127
6.3.1 Higher Education’s Importance, Structure, and Evaluation.....	127
6.3.2 The Effect of the External Environmental on Higher Education’s Goal.....	133
6.3.3 The influence of goal on the attributes of HEIs	142
6.3.4 The relationship between the attributes and benefits of higher education ...	148
6.3.5 Higher Education’s Benefits	150
6.3 Main Study Key Findings	154
6.4 Chapter Summary	155
CHAPTER SEVEN-DISCUSSION AND REVISED FRAMEWORK	157
7.1 Introduction.....	157
7.2 Revised Framework for Higher Education Assessment	158
7.3 The Revised Effect of External Environmental on Higher Education Goals.....	160
7.3.1 Demographic Factor.....	161
7.3.2 Infrastructure Factor.....	163
7.3.3 Cultural Factor	164
7.3.4 Economic Factor.....	165

7.3.5 Rules and Regulations Factor	166
7.4 Revised Means-end Theory of Decision-making.....	167
7.4.1 Goal of Higher Education	167
7.4.2 Benefits of Higher Education	168
7.4.3 The Attributes of the HEIs	171
7.5 Revised Nature of the Means-end Theory of Decision-making.....	172
7.5.1 The dynamic nature of Means-end Theory	173
7.5.2 The OODA Loop Effect	174
7.6 Chapter Summary	174
CHAPTER EIGHT-CONCLUSION AND CONTRIBUTION.....	177
8.1 Introduction.....	177
8.2 Meeting the Research’s Aim and Objectives	178
8.3 Research Finding and Evaluation	179
8.4 Research Novelty	182
8.4.1 Theoretical Contribution	183
8.4.2 Practical Contribution	184
8.5 Research Limitations	184
8.6 Lessons Learned from Assessing the Higher Education Environment.....	185
8.7 Future Research Recommendations.....	187
9.0 References.....	188
10.0 Appendices.....	207
Appendix 1 Litter of Permission 1	207
Appendix 2 Litter of Permission 2.....	209
Appendix 3 List of Codes Used in Data Analysis	210
Appendix 4 Letter of Ethical Approval	211
Appendix 5 Participant information sheet	212
Appendix 6 Consent Form.....	216
Appendix 7 Interview Questions (Final).....	217

List of Figures

Figure: 1. 1 Structure Plan	11
Figure: 2. 1 Population of Bahrain’s public higher education institutions (2016).....	19
Figure: 2. 2 Bahrain’s Public and Private HEIs’ Population (2016).....	20
Figure: 2. 3 A typical SWOT analysis template	31
Figure: 2. 4 PESTLE model sub-elements Blackburn, (2016)	34
Figure: 2. 5 PESTLE analysis variations	34
Figure: 2. 6 Porter's Value Chain Model	36
Figure: 2. 7 Means-end Theory.....	42
Figure: 2.8 The OODA Loop Model	44
Figure: 2. 9 Simon's Model of Decision-Making.....	45
Figure: 3. 1 Conceptual Framework Development (Author).....	54
Figure: 3. 2 Effect of demography on higher education’s goal (Author).....	57
Figure: 3. 3 Impact of infrastructure on higher education’s goals (Author)	58
Figure: 3. 4 Effect of culture on higher education’s goals (Author).....	59
Figure: 3. 5 Influence of the economy on higher education’s goals (Author)	60
Figure: 3. 6 Impact of regulations on higher education’s goals (Author).....	61
Figure 3. 7 Initial Conceptual Framework.....	63
Figure: 4. 1 Research Onion	67
Figure: 4. 2 Critical realism’s philosophy metaphor.....	69
Figure: 4. 3 Deductive approach by Bryman and Bell (2007, P.11).....	73
Figure: 4. 4 Research method comparison.....	81
Figure: 4. 5 Research Design	84
Figure: 4. 6 Data Analysis Process	89
Figure: 6. 1 The effect of demography on goal of higher education.....	135
Figure: 6. 2 Effect of infrastructure on the goal of higher education.....	137
Figure: 6. 3 Effect of culture on the goal of higher education	138
Figure: 6. 4 Effect of the economy on the goal of higher education.....	140
Figure: 6. 5 Regulations affecting higher education’s goal	142
Figure: 6. 6 Significance of the benefits of higher education in Bahrain	152
Figure: 6. 7 Main drivers for joining higher education in Bahrain	154
Figure: 7. 1 Revised Higher Education Assessment Framework (DICER)	160

List of Tables

Table: 2. 1 Bahrain's Main Economic Indicators	15
Table: 2. 2 Breakdown of Economic Activity by Sector	15
Table: 2. 3 Higher Education Institutions in Bahrain	17
Table: 2. 4 Importance of higher education	23
Table: 2. 5 Different goals of higher education	26
Table: 2. 6 Factors Affecting Higher Education	29
Table 2. 7: PESTLE Versions	35
Table: 2. 8 Analysis tools comparison	38
Table: 2. 9 Decision Models Comparison.....	47
Table: 2. 10 Literature Gap Findings	48
Table: 3. 1 Research propositions' alignment with the thesis' questions	55
Table: 4. 1 Cross-sectional vs longitudinal research comparison	82
Table 4. 2: Case study questions table	91
Table: 5. 1 Pilot case study participants.....	95
Table: 6. 1 Participants in the case study	126
Table: 6. 2 Significance of higher education's benefits.....	151
Table: 6. 3 Main drivers of higher education enrolment in Bahrain	153
Table: 7. 1 Demographic effect on higher education.....	162
Table: 7. 2 Infrastructure's effect on higher education	164
Table: 7. 3 Cultural factor's effect on higher education	164
Table: 7. 4 Economy's effect on higher education's goal.....	166
Table: 7. 5 Effect of regulations on higher education's goal	167
Table: 7. 6 Higher education's goals comparison.....	168
Table: 7. 7 Higher education's benefits comparison.....	171
Table: 7. 8 Higher education's attributes comparison	172
Table: 8. 1 Research Objectives' Achievement through the course of the thesis	178

CHAPTER ONE-RESEARCH INTRODUCTION

1.1 Introduction

*"Proclaim! (or read!) in the name of thy Lord and Cherisher, who created * Created man, out of a (mere) clot of congealed blood * Proclaim! And thy Lord is Most Bountiful * He Who taught (the use of) the pen * Taught man that which he knew not"*
Holy Quran Chapter 96 verse 1-5

The importance of higher education is widely recognised at all levels, whether individually, nationally, or globally. However, these levels must work together to highlight its significance. According to Roberts and Ajai-Ajagbe, (2013), The United Nations recognises higher education as pivotal to human sustainable development. In line with this, World Bank Data, (2017) noted that most world governments have increased their education budget steadily over the last four decades through direct sponsorship or subsidizing the cost of education. For example, according to UNSECO data, Mauritius' expenditure on education as a percentage of GDP has risen from 3.94% in 1999 to 5.08% in 2017.

A study by Fitzgerald *et al.*, (2016) recognises the important role of higher education institutions in engaging with the community. They defined the engaged university as the one that can produce research of significance that aids the society and educates students for productive roles in a modern and diverse world. Similarly, on the individual level, a global report entitled "The Value of Education" by HSBC group, (2015) found that 64% of parents say that being happy in life is one of the most important goals they have for their child, compared to only 30% who mention career success. Moreover, 79% of parents see an undergraduate degree or higher qualification as essential to their child's achievement of important goals in their life, while 50% think that a postgraduate degree (master's or higher) is necessary and 39% of parents have paid for additional tutoring for their child at the primary school stage, 44% at the secondary school stage, and 23% at the university stage.

On the other hand, the higher educational institutions' (HEIs') shareholders view higher education as a lucrative business. According to Prasad and Jha, (2013), the higher education sector has a direct impact on society in terms of the

socio-economic growth of a country. There is a demand for training, knowledge, skills and expertise, which are being provided by the higher educational institutions. All the above statements are valid but, nevertheless, there exists a huge gap between all the above-mentioned beneficiaries' goals, strategies and implemented policies.

This research focuses on the importance of higher education to the primary beneficiaries (students, parents, and HEIs personals), assesses the effect of external environmental factors on the higher education sector, explore the defined goals of higher education, analyse the benefits of higher education, and define the attributes of successful higher education institutions. This research explores how different beneficiaries view the importance of higher education to unify the views of concerned beneficiaries on the vital role of higher education and bridge the gap between different views when it comes to shaping the goal of higher education. This thesis starts by examining the extant literature on the topic as part of the background theory element (Phillips and Pugh, 2005) to select a focal theory before building a conceptual framework. After selecting the most suitable method for conducting this research, based on the findings and analysis, an overall conclusion will be drawn, accompanied by suggestions for potential future research.

1.2 Research Background and Context

Before conducting this research, the researcher had an interest in evaluating higher education institutions based on custom fit criteria. Many academic papers were reviewed to explore a path that allows a measurable way to evaluate higher education such Kashif *et al.*, (2016); and Hazelkom, (2015) who based their work on Berlin Principles developed by UNESCO to regulate the ranking systems of higher education. However, an in-depth reading and review of the extensive literature on this subject led the researcher to a different understanding of higher education's importance and its vital role in different countries' economic growth. According to Armstrong (2016), higher education is often regarded by economists as a confidence product or service i.e. its impact is difficult for the consumer to evaluate in advance and remains difficult, even after consumption.

Over the past 20 years many scholars tried to analyse the performance of higher education through many ways. For example, Ali *et al.*, (2005) argued that higher education performance can be measured based on service quality whereas Abolhasani and Oakes, (2017) thought that university image plays an important role in the attitude of public toward the institution. On the other hand, Bloch and Mitterle, (2017) argue that higher education is a global sector and therefore must be analysed internationally. Despite all the above, the researcher strongly believes that higher education must be analysed as a service with an attributes, benefits, and goal. For that reason, according to Armstrong (2016), the analysis of higher education tends to depend on its attributes in order to assess and measure the values and benefits of such credence-based products or services, leading to a gap between the values or goals of higher education as shaped by strategists and the lower levels such as consumers (parents and students). This fact inspired this research, which seeks to understand the nature of higher education's importance and the factors affecting it.

For this research, the researcher will analyse the higher education sector in Bahrain, which is relatively new compared to basic education that started in 1919 and considered to be the oldest in the Arabian Gulf region. According to, (2012), higher education took almost half a century to emerge through the opening of an institute for teachers in 1966. Two years later, the Gulf Polytechnic began to accept both national and international students in 1968, as a public Gulf Technical College. Today, there are 12 currently active accredited HEIs in Bahrain, offering both undergraduate and postgraduates' programs.

Despite recent discoveries of shale oil and deep gas, Bahrain is a small island nation, whose oil reserves are scarce, and its economy is facing difficulties due to a complex population composition, so the country has been experiencing waves of social upheaval. These factors prompted the Bahraini authorities to embark on the path of diversification reform ahead of other countries in the region. After the discovery of oil and gas in 1932, the government recognised the need for economic diversification (Wilkenson and Atti, 1997). The shift from an oil-based economy was initiated through governmental investment in industry, notably an aluminium plant and a ship-repair yard, as well as economic

liberalisation reforms fostering private entrepreneurship (Karolak, 2012). Moreover, since the 1980's, Bahrain has positioned itself as a banking hub for the region.

According to the Bahrain National higher education strategy (2014-2024), higher education plays a central role in Bahrain's economic growth, innovation and investment. This role requires a strategic vision to face the ever-changing challenges of the higher education environment. The vision was set by the Higher Education Council "to position Bahrain as a regional hub for quality higher education, producing graduates with the skills, knowledge, and behaviours required to succeed in the global knowledge economy while contributing to the sustainable and competitive growth of Bahrain".

For this reason, the researcher asserts and according to Karolak, (2012) who pointed to recent initiatives undertaken in Bahrain to monitor and ensure the quality of education of cross-border educational institutions as well as that of local education providers. Consequently, higher education reforms and development are among the most important steps towards achieving human sustainable development and economic growth, as they help to build more aware, skilful and knowledgeable individuals who can participate in achieving Bahrain's national vision.

1.3 Research Problem

Over the years, higher education has been always criticised for many reasons. For example, and according to Brint and Clotfelter, (2016) universities were mainly blamed for insufficient attention to teaching and financial abuse in the form of raised tuitions and fees, but despite the above allegations higher education institutions remained an important and an integral part of the development of any society as a knowledge beacon and source (Fitzgerald *et al.*, 2016). In addition, Bowe *et al.*, (2017) illustrated how education in UK shifted from a problem to a solution and became a crucial factor of economic productivity and competitiveness in the context of what is known today as the "Knowledge Economy".

The importance of higher education to various countries' economic growth has been the topic of many research and academic papers in the recent decade. According to Finch *et al.*, (2013), the past 60 years have witnessed a dramatic increase in education enrolment. For example, prior to World War 2, higher education was reserved for the elite. However, due to public policy and demographic changes, there has been a considerable increase in the higher education enrolment rates in developed countries. For instance, the number of higher education institutions in Canada grew from 28 to 87 between 1918 and 2009 (Scott, 2005). This growing interest in higher education is further confirmed by the fact that, in Canada, the higher education enrolment rate increased at a rate of approximately 3.1% per year. This increased enrolment has resulted in a significant increase in the number of certificates granted by these higher education institutions.

Varghese (2016) noted another important reason why higher education is attracting the attention of researchers and academics, which is its importance to economic growth, as it contributes to the development and growth of income in three main ways. First, participation in the labour force is greater among higher education graduates than non-graduates. The second reason is that the unemployment rate in many countries is lower among higher education graduates. Finally, people with higher education certificates are more likely to be better paid, leading to a general growth in income.

In addition, researchers have highlighted the factors that influence the higher education policies reforms. For example, according to Tjeldvoll, (2008), the Finnish government decided to restructure Finnish higher education to counter the challenges of globalization in its many aspects. First, the growing demand for reform was due to an increase in higher education's importance regarding economic growth and social development. Moreover, the higher education institutions contribute to innovation through research as new areas of knowledge production.

For the above reasons, the researcher believes that higher education's importance calls for further research; together with an investigation on how strategic decisions are made and on what bases they are implemented. From this

comes a need for an alternative approach which may enable concerned decision-makers to assess the higher education environment in order to shape its goal, assess its benefits, and define its attributes. The result will be a frame of reference suitable for concerned beneficiaries (students, parents, and higher education institutions administrators) to enable them to make the right decisions regarding the higher education strategies' planning and execution. It's imperative to look closely at the environment of the higher education sector and define its goal, attributes, and benefits.

The proposed frame of reference must take into consideration the many challenging factors, such as the limited population, the modernity of the higher educational experience, and the limited amount of research carried out in the region as well as the fact that most universities use Arabic as the language of instruction, rather than English, as is widely adopted globally. The research problem can be summarised by the fact that the extant higher education strategies are commonly imported without considering the effect of the local environment in addition to the gap between different beneficiaries' perspectives when it comes to shaping the goal, assessing the benefits, and defining the attributes of higher education.

1.4 Research Aim and Objectives

There are many views regarding the reshaping and reforming of higher education and there is no doubt that many more will emerge in the future. Many academics and practitioners clearly suggest that the higher education sector is a credence-based product or service, whereas others regard it as a lucrative business. According to O'brien and Williams (2016), higher education is seen by some as a public service and consequently as concerned about equity, arguing that education should be available to all. On the other hand, Dill, (2015) stress that the 'knowledge' provided by education is a commodity, arguing that higher education needs resources, so someone must pay for these. Between the two extremes, the challenge remains how to reach a compromise between these two stances. An increasing number of studies are emerging on the reshaping of higher education, such as (Leisyte, 2015), (Bernasconi, and Celis, 2017), and (Altinyelken, 2018), but there is a dearth of research studies focusing on the

influence of the external environment on higher education reforms as a decision-making model.

The aim of this thesis is

“to assess the influence of external environment factors on the higher education sector based on the means-end theory of decision making”.

The proposed frame of reference will be utilised to unify the perspective of different levels of beneficiaries when shaping the goal of higher education and provide them with a decision-making model that will enable the higher education authorities, parents and students to shape this goal, assess higher education’s benefits, and define its attributes.

To achieve this aim, four objectives must be met. These objectives may be summarised as follows:

- To explore the effect of external environmental factors on Bahrain's higher education sector.
- To investigate the importance of higher education to primary beneficiaries (students, parents, and higher education administrators).
- To determine whether higher education’s benefits for beneficiaries serve Bahrain’s higher education goal.

1.5 Research Questions

Based on the earlier sections that presented the research problem, aims, and objectives, three broad, general research questions arise that needs to be addressed and discussed. These questions can be formulated as follows:

- How do external environmental factors define Bahrain’s higher education goal?
- Why is higher education important to Bahrain?
- How does Bahrain’s higher education goal align with higher education primary beneficiaries?

1.6 Research Approach

An exploration of these objectives requires an approach that not only describes the relationships between the environment, goal, benefits, and attributes, but also demonstrates how concerned beneficiaries make decisions in the higher education sector, whether as a student, a parent, or even a higher education institution administrator. In addition, the researcher will analyse the extant decision-making strategy structure of all concerned beneficiaries. Therefore, the research employs an exploratory qualitative approach based on a combination of inductive and deductive methods to comprehend and understand the relationship between the environment and the decision-making process. The researcher will observe the higher education sector as an environment before electing a focal theory for constructing a framework that enables the beneficiaries to align higher education's benefits and attributes with the country's published goal. Through conducting a pilot case study and a main study of two public higher education institutions, the researcher aims to analyse the effect of the environment on shaping the goal, identify the benefits and define the attributes of a sound decision-making process.

Although the data required for this topic can be collected and analysed quantitatively, the researcher opted to explore the effect of the environment on higher education by adopting a qualitative approach in order to gain in-depth understanding of how a specific environment affects higher education's concerned beneficiaries. The qualitative approach will be employed to answer not only how the environment shapes the goals of higher education but also to establish how a frame of reference will improve the decision-making process of and further develop the standards of the existing higher education institutions.

1.7 Thesis Outline

The thesis is divided into eight main chapters, in addition to the references and appendices. It follows the structure suggested by (Phillips and Pugh, 2005) and consists of four elements: (1) background theory, (2) focal theory, (3) data theory, and (4) novel contribution. The background theory presents the general research topic addressed in (chapter 1), analyses the extant research and

pinpoints the gaps, based on the literature review (chapter 2). The background theory is then utilised to identify the focal theory of this research, which helps to create a conceptual framework (chapter 3) to be tested empirically. The third main element is the data theory, which is concerned with selecting the most appropriate methodology to adopt, as discussed in chapter 4 of this thesis. Chapters 5 and 6 then present and analyses the data collected from both the pilot and main case study, establishing the empirical core of this thesis. The fourth and last element (novel contribution) addresses the relationship between the empirical findings and the general body of knowledge presented in chapter 7, which summarises the research and highlights areas where further research might be required. Below is a breakdown of the thesis' structure.

First Element: Background Theory

Chapter 1: Introduction

Chapter one provides a general overview of the research and addresses the main points concerning higher education. The focus of the research is to shed light on the importance of integrating external environmental factors to shape higher education's goal and improve the decision-making process regarding higher education reform. This chapter concludes with an outline of the structure of the whole thesis.

Chapter 2: Literature Review – Critical Analysis of the Research Area

This chapter analyses the extant research on higher education, together with its importance, goal, benefits, and attributes. Chapter 2 critically reviews higher education and its development, before exploring several managerial tools that assist the external environment and electing decision theories. Finally, it lays out the findings and presents the research gaps.

Second Element: Focal Theory

Chapter 3: Developing a Conceptual Framework for Higher Education Reform using a Decision-making Model

After reviewing the extant theories in the literature review, the researcher will select and modify the most suitable one and propose a conceptual framework for higher education reform utilising a decision-making process (see figure 3.1 in chapter 3). The aim of this frame of reference is to present the decision-maker with an easy-to-follow pattern that relates the goal of higher education to benefits and attributes, through the integration of local external environmental factors that affect higher education.

Both Chapters 2 and 3 serve as the foundation for this research that helps the researcher to develop the conceptual framework for higher education reform using a decision-making model. The importance of Chapter 3 arises from its provision of a set of relationships to be tested in the following thesis.

Third Element: Data Theory

This element can be seen in three consecutive chapters of the research: Chapter 4 (which identifies the most suitable research methodology), Chapter 5 (that presents and analyses the data for the pilot case study), and Chapter 6 (that present and analyses the findings of the main case study).

Chapter 4: Research Methodology – A Qualitative Case Study Approach

Chapter 4 presents the rationale for the research methodology adopted. It begins by offering a general review of the established research methodologies in terms of the philosophical perspective that suits and is related to the research topic. Chapter 4 also provides an analysis of the selected research strategy and method, which were an exploratory case study strategy utilising a qualitative method.

Chapter 5 and 6: Pilot and Main Case Study Findings and Analysis

These chapters present a detailed description of the pilot case study conducted in a public higher education institution in Bahrain. It starts by presenting the background of the chosen HEI, referred to as (HEI-X). The findings are then described, and the main topics of the research analysed, including: (a) the importance of higher education and its structure; (b) the effect of the external environment on higher education's goal

s; (c) the influence of higher education's goal on attributes; (d) the relationship between the attributes and benefits of higher education; and, finally, (e) the benefits of higher education.

Fourth Element: Novel Contribution

Chapter 7 and 8 – Discussion and Conclusion

These chapters summarise the overall research study. It starts by reporting how this thesis achieved its research aim and objectives. It then presents the overall research findings and analyses the main findings, consequently addressing the potential limitations of this research. After that, it illustrates the development of the conceptual framework's theoretical and practical contributions to the body of knowledge through explaining the novelty of this thesis. Finally, it suggests some potential areas for further research.

1.8 Research Structure Plan

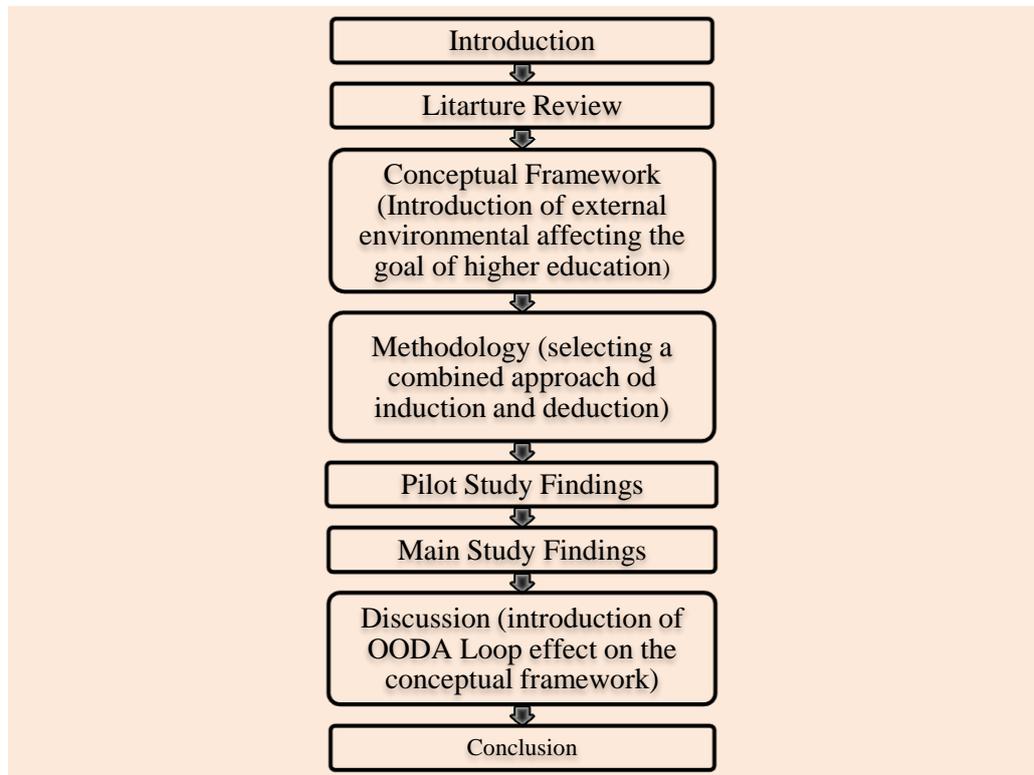


Figure 1.1: Structure Plan

1.9 Chapter Summary

After introducing the area of research and its importance individually, collectively, and globally, this chapter has presented a brief background of the thesis. Moreover, it has illustrated and justified the research problem associated with the research topic. A clear research aim and objectives have been presented. In addition, the researcher laid out the three major questions before selecting the most suitable research approach. Finally, the whole thesis plan was illustrated in a simple figure to allow the reader to understand how the research was conducted.

CHAPTER TWO- LITRATURE REVIEW

2.1 Introduction

In this chapter, the researcher presents the context and rationale of the study before focusing on the importance of higher education, the goal of higher education and the external factors affecting higher education in general and its set goal to compare them with the empirical data of this paper. The body of literature on the field of higher education is vast and diverse. Some researchers have examined the quality while others have assessed the economic aspect and still others have focused on the ethics of higher education. This research will consider the importance of higher education from a strategic level perspective as a major aspect of developing any society.

The literature review will include, in addition to the research context and the importance of higher education, an assessment through comparing several well-established management tools used to analyse the environment in order to develop a suitable tool to use as a moderator affecting the nature of the relationships between the focal theory constructs. This chapter also compare three decision models to select the most suitable one for developing the research's conceptual framework.

2.2 Research Context and Rationale

Higher education's importance and the need for continuous development has been a central interest for the authorities and academics alike. According to Orr, (1999), different countries usually have different reasons for embracing higher education. Henry and Jennie, (2016) claim that countries are concerned about appearing modern and forward thinking, and so promote education as a sign of modernity and acceptance of the Western standards of education.

In addition, the researcher noted that businesses are also interested in higher education because they see it as both a lucrative business and an international commodity (Altbach, 2015). This fact highlights the need to investigate the importance of higher education to different beneficiaries. Furthermore, the researcher strongly believes that approaches to higher education reform must

differ from one environment to another. Due to that fact, this research will focus on Bahrain as an example due to the simplicity of accessing the decision-makers and higher education primary beneficiaries.

In a region with a general wealth from oil industry, Kingdom of Bahrain is a small open society and economy, which doles from relatively favourable economic situations. The refining and production of oil signify 80% of Bahrain's income. The small country is striving to position itself as a key regional player in financial services (notably in the Islamic financial industry), telecommunications and transports. Bahrain is considered at the forefront of banking innovation and regulation in the Middle East due to its membership to Basel Committee of Banking Supervision. This brief economic background of Bahrain lays the foundation to the challenges facing the country economically (Lloyds Bank, 2018).

According an economic and political overview presented by Lloyds Bank, in 2018, dependency on oil negatively affected Bahrain due the scarce of oil production and the global drop of oil prices. In 2017, the growth kept on slowing down to reach 2.5% of the GDP (as to compare with a 5.4% GDP growth in 2013). Regional political situation along slowing economic growth impacted heavily Bahrain's economy. In 2017, public debt boomed, reaching 90% of GDP (estimated to 30% of GDP in 2018) and public deficit deepened (13% of GDP in 2017). The priority of the government is to rebalance its finances while preserving the growth. For that to take place, a program of privatisation of public services (water and electricity), a rise in taxes and users fee and a decrease of subsidies are among the measures enforced by the government. The diversification strategy is starting to bear fruit as the country is set to own the largest single-site aluminium smelter in the world by 2019 with the Aluminium Bahrain's (Alba). Table 2.1 below illustrate Bahrain's main economic indicators over a period of five years.

Table: 2. 1 Bahrain's Main Economic Indicators (Lloyds Bank, 2018)

Main Indicators	2015	2016	2017	2018 (e)	2019 (e)
GDP (<i>billions USD</i>)	31.13	31.86	33.87e	35.37	36.64
GDP per Capita (<i>USD</i>)	24,063	24,146	25,170e	25,764	26,167
Inflation Rate (%)	1.8	2.8	0.9	3.5	2.1
Unemployment Rate (<i>% of the Labour Force</i>)	3.4	3.7	3.8	3.9	3.9

Bahrain's industry sector on the other hand is deeply imbalanced as shown in table 2.2 below. This imbalance influences countries ability to develop and leads to an inflation of some sectors effecting higher education courses diversification. The researcher presented the above data intending to introduce how economy affects higher education and eventually the labour market and Bahrain's economy.

Table: 2. 2 Economic Activity by Sector (Lloyds Bank, 2018)

Breakdown of Economic Activity by Sector	Agriculture	Industry	Services
Employment by Sector (<i>in % of Total Employment</i>)	1.0	35.1	63.9
Value Added (<i>in % of GDP</i>)	0.3	39.8	59.9
Value Added (<i>Annual % Change</i>)	-3.1	2.2	3.2

The higher education sector in Bahrain is relatively young compared to basic education that started in 1919 and is the oldest in the Arabian Gulf region. Higher education took almost half a century to commence through the opening of an institute for teachers in 1966. Two years later, in 1968, the Gulf Polytechnic began to admit both national and international students as a public Gulf Technical College. Today, there are 12 accredited active HEIs in Bahrain offering both undergraduate and postgraduate programs.

2.2.1 Background to the Higher Education Institutions in Bahrain

Bahrain shares problems with other GCC members; nonetheless, it presents a slightly different pattern of economic development. Bahrain is a small island nation; its oil reserves have almost dried up despite recent discoveries of shale oil and deep natural gas and, due to its complex population composition, the country has been experiencing waves of social upheaval.

These factors have prompted the Bahraini authorities to embark on a path of diversification reform ahead of other countries in the region. Following the discovery of oil and gas in the 1930's, the government had already recognized the need for economic diversification (Wilkenson and Atti, 1997). The shift from oil-based economy was initiated through government investment in industry, notably an aluminium plant and a ship-repair yard, as well as economic liberalization reforms designed to foster private entrepreneurship (Karolak, 2012). Moreover, since the 1980's, Bahrain has positioned itself as a banking hub for the region.

Higher education plays a central role in Bahrain's economic growth, innovation and investment. This role needs a strategic vision to combat the ever-changing challenges of the higher education environment. The vision was set by the Higher Education Council "to position Bahrain as a regional hub for quality higher education, producing graduates with the skills, knowledge, and behaviours required to succeed in the global knowledge economy while contributing to the sustainable and competitive growth of Bahrain".

Up until 1968, there was no institution of higher education in the Kingdom so high school graduates wishing to continue their studies had to travel abroad in order to pursue their higher education goals. Bahrain experienced two waves of development of tertiary education institutions. The first wave started in the late 1960s and reached a peak in 1986 with the opening of the University of Bahrain (UoB). This period was marked by the establishment of public institutions of higher learning, such as the Teachers College in 1966, the Gulf Technical College (later renamed Bahrain Polytechnic) in 1968, the College of Health

Sciences in 1976, and the College of Arts, Science and Education and the Arabian Gulf University in 1979.

The University of Bahrain (UoB) was created through the merger of Bahrain Polytechnic and the College of Arts, Science and Education. With the advent of the new millennium, Bahrain experienced a boom in private higher education, and 12 private institutions were established during that decade. In contrast, only one public institution, Bahrain Polytechnic, opened its doors in 2008, serving as a centre for professional and technical education. The wave of Higher Education Institutions' (HEIs') development, which started in the 2000's, was linked to the transition from an economy dependent on natural resources and to the changing population's needs. Table 2.3 below lists all the higher education institutions in Bahrain and their year of establishment, as well as their current type and status.

Table: 2. 3 Higher Education Institutions in Bahrain (Author)

No	Name	Type	Established
1	The Teachers' Institute (closed)	Public	1966
2	Gulf Technical College (merged to form the University of Bahrain)	Public	1968
3	The College of Health Sciences (part of the University of Bahrain)	Public	1976
4	Arabian Gulf University (GCC)	Regional	1979
5	Bahrain Bankers Training - Bahrain Institute of Banking and Finance (BIBF)	private	1981-1994
6	University of Bahrain	public	1986
7	Ahlia University	Private	2001
8	Gulf University	Private	2001
9	The Kingdom University	Private	2001
10	University College of Bahrain	Private	2001
11	AMA international University	Private	2002
12	Arab Open University	private	2002
13	New York Institute of Technology (closed)	private	2003
14	RCSI Medical University of Bahrain	Private	2004
15	Delmon University for Science and Technology (closed)	private	2004
16	Applied Science University	Private	2004
17	Royal University for Women	Private	2005
18	Bahrain Polytechnic	Public	2008
19	Talal Abu Ghazaleh University College	Private	2012

2.2.2 Public Higher Education Institutions

Today, there are two public higher education institutions in Bahrain that accommodate an estimated 29,000 students (2017). The Amiri Decree (1986) publication regarding the formation of the University of Bahrain in 1986 heralded a new era in education in the history of Bahrain. This meant that the present institutions, namely Gulf Polytechnic and University College of Arts and Sciences, would be brought under one administrative umbrella. The President, Vice-Presidents, Deans and Heads of the Departments would be the vital administrative force, supported by the teaching staff. University enrolment was determined by three main factors: the demand for higher education, the need for qualified manpower, and the economic situation of the State. In 2008, Bahrain Polytechnic was established by His Majesty King Hamad bin Isa Al Khalifa by *Royal Decree No.65 for the year 2008*.

Bahrain Polytechnic is governed by a Board of Trustees by *Royal Decree No.23 for the year 2012*, chaired by H.E. Shaikh Hisham bin Abdulaziz Al Khalifa that includes renowned industry and community leaders. Bahrain Polytechnic was established by the Bahraini Government to address the need for a skilled Bahraini labour force, with the aim of supporting economic growth and diversification.

Bahrain Polytechnic offers applied, professional and technical qualifications. Graduates will be work-ready: confident and competent, aware of what is expected of them in the professional world, and able to perform to their full potential. Programmes, qualifications and courses, together with the underlying methodology of how they are delivered, are developed in consultation with businesses, industry, professions, international education and training institutions. This strategy, set by the Board of Trustees, will ensure that Bahrain Polytechnic graduates meet the needs of the labour market, thus supplying Bahrain's economy with a source of highly skilled graduates.

The Royal Decree established the Polytechnic as a Governmental Higher Education Institution and gives the Board of Trustees the right to approve and grant certificates and qualifications in the disciplines taught at the Polytechnic,

including the first Bahrain Polytechnic Bachelor students, who fulfilled the graduation requirements in July 2013. Figure 2.1 below shows the population of students enrolled in Bahrain's public higher education institutions and how they are allocated.

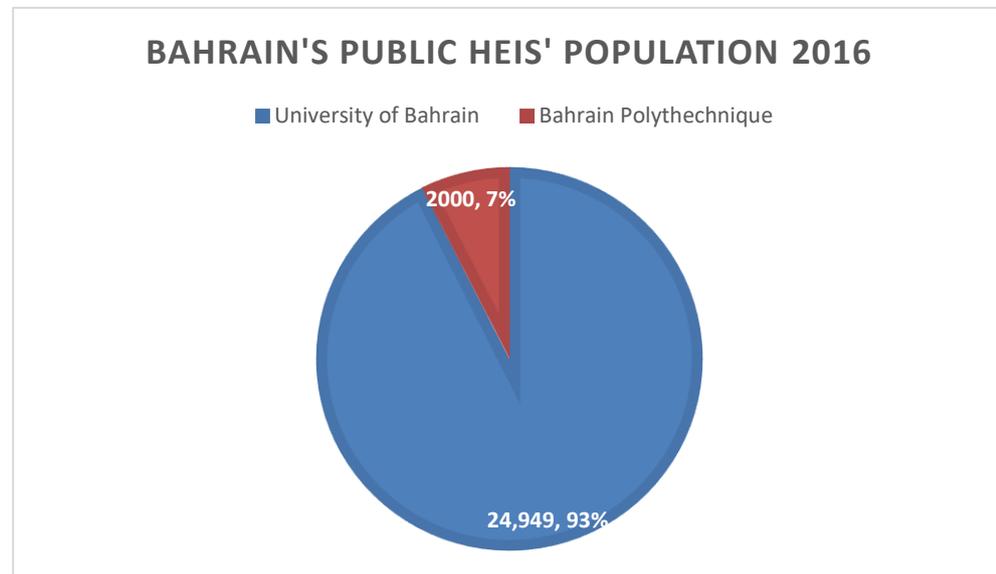


Figure: 2. 1 Population of Bahrain's public higher education institutions (2016) (Author)

2.2.3 Private Higher Education Institutions

Bahrain has been experiencing, along with other Gulf Council Cooperation countries, rapid development in its higher education sector. The 2000's were marked by a noticeable boom in higher education, with the opening of 12 private universities in a country of roughly one million inhabitants. Several institutions were locally-based, while others worked in affiliation with foreign-based universities. This is in sharp contrast with the 1990's, when only three public universities served as centres of higher education. The reasons behind this sudden expansion of higher education include the growth of the local and expatriate population, the planned transition from an oil industry to a knowledge-based economy as well as the growing role of women in the workforce. All these factors need to be addressed in order to ensure stable social and economic development, and education is the backbone of both. Section 5.1 shows that there have been 15 operational private higher education institutions in Bahrain since the late 1990's and early 2000's, but if we look closely at those

institutions, we can see that they fail to attract the full quota of students. Figure 2.2 below shows the student populations of the private higher education institutions in Bahrain.

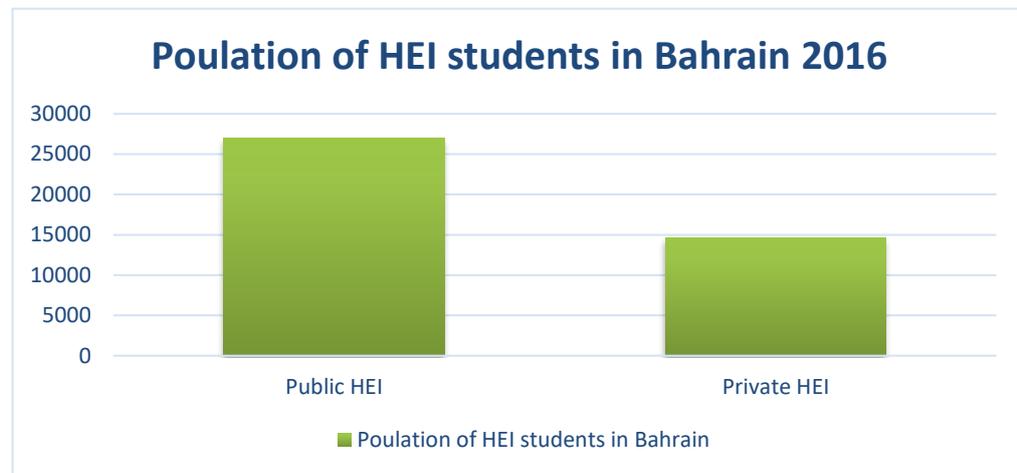


Figure: 2. 2 A Comparison of Bahrain’s Public and Private HEIs’ Population (2016) (Author)

2.3 Higher Education Sector

Although higher education refers to any type of academic learning after higher school, some academics believe that education in general, and higher education, is becoming an internationally-traded commodity (Altbach, 2015). He noted that education is no longer seen primarily as a set of skills, attitudes, and values required for citizenship and effective participation in modern society, that enable individuals to make a key contribution to the common good of any society. Altbach argues that education is increasingly seen as a service purchased by a consumer to build a “skill set” that he or she can then use in the marketplace and that this service can be provided either by national or multinational institutions.

2.3.1 Importance of Higher Education

The importance of higher education to individuals and society has been emphasised in many articles. According to Kyllonen, (2012), higher education is valuable for the individual and beneficial to a country’s economy and society. However, he stressed that not all students are ready to attend higher education in its present form. The attainment of higher education has grown in the past 30

years. For example, higher levels of educational attainment lead to increased earnings and decreased unemployment (Card, 1999), while laterally higher education attainment reduces crime rates, makes societies healthier and creates stronger communities (Lochner, 2011).

Higher Education is a process that aims to achieve defined goals for a specific target group. The learning goal combines disciplinary, social, cultural, and economic aspects. The targets of higher education are students who have completed secondary schools. The higher education system strives to provide contexts that support the learning of individuals, starting with the theoretical concepts of learning, to create a set of skills and knowledge in him/her. On the other hand, the higher education environment is designed to be able to deliver the content through supervision and testing. According to Donnelly, (2017), the higher education sector aims to prepare high school graduates and young adults to function in society and the labour market in both the socio-cultural and economic aspects.

Kyllonen, (2012) argues that the relationship between higher education attainment and the labour market does not only exist in the United States but is evident in Latin America as well. Carr, (2009) describes this relationship as a causal one, which means that the higher the education level, the lower the chance of unemployment. Other benefits of higher education include better jobs and higher self-esteem (Oreopoulos and Salvanes, 2011). A clear indication of this causal relationship is the increased rate of higher education enrolment worldwide, from almost 9% in the 1970's to almost 33% in 2014, according to UNESCO reports. The researcher believes that Kyllonen's work strengthens the need to study the importance of higher education in Bahrain.

The importance of higher education's quality has been tied to economic success in many articles. For example, Pavel, (2012) argue that the world has recognised that the economic success of a country is directly related to the quality of its higher education and that the most effective factor regarding production is human capital, articulated as the knowledge, skills, creativity and ethical qualities of individuals in society. He claims that higher education is important for both individuals, and society. It aids the development and growth of the high

school graduates and is fundamental for achieving a better life. For the community, higher education institutions can assist the creation of ideal citizens, who will help to maintain a peaceful society.

Pavel, (2012) stresses that, since globalization became a reality, the job market has become more competitive and, for that reason, higher education graduates compete for jobs no longer on a local scale but on a global one. This, in Pavel's view, emphasises the importance of attaining higher education with high quality international standards. However, Pavel believes that quality can determine the importance of higher education and can be measured by indicators like rankings and how closely related the higher education is to the labour market.

The importance of higher education exceeds human development and it is considered a profitable industry that can be as lucrative as any other industry, like tourism or the hardware industry. According to Verger *et al.*, (2016), the US higher education industry revenue has more than doubled in the last decade, increasing from \$60 billion in 1999 to \$125 billion in 2012 (BMO Capital Markets 2014). Verger *et al.*, added that the Merrill Lynch-Bank of America estimated that, in 2014, the value of the higher education sector worldwide was (USD) 4.3 trillion. In fact, according to a report produced for Universities UK by Ursula Kelly, Emeritus Professor Iain McNicoll and James White of Viewforth Consulting Ltd., in 2011-12, higher education contributed over £73 billion in output (both direct and indirect), contributed 2.8% of UK GDP, and generated 2.7% of all UK employment opportunities, which is equivalent to 757,268 full-time jobs.

The researcher shows that both quality and the above-mentioned relationship are not the best way to assess the importance of higher education for three main reasons. First, 'quality' is a very broad term that is defined differently by many scholars, so it is almost impossible to define let alone measure the quality of higher education. Second, rankings display bias and an inability to compare quality, as most rankings compare apples to oranges and can be manipulated to show different results as the markets dictates. Finally, tying higher education to the labour market will not work, simply because the labour market is a highly

dynamic environment that changes faster than the four-year period spent at university.

To illustrate the importance of higher education, the United Nations announced, in 2016, eight goals aiming to achieve global development, named the Millennium Development Goals (MDGs). Higher education was not specifically among these goals but, to achieve the MDGs, higher education was implicitly present. According to Roberts and Ajai-Ajagbe, (2013), Higher Education Institutions (HEIs) are responsible for generating jobs and occupations, like engineers, health specialists, teachers, policymakers, technologists, and scientists, whose knowledge and leadership are required to improve people's lives. HEIs have a huge influence on generating the innovative knowledge essential to deal with issues of food security, disease, climate and environmental change, and the causes and effects of poverty. Table 2.4 highlights the importance of higher education in the reviewed literature.

Table: 2. 4 Importance of higher education (Literature summary)

Importance of Higher Education	Reference
Higher education is valuable for the individual and beneficial to an economy and society.	(Kyllonen, 2012)
Higher education reduces the rates of unemployment and increases the chances of achieving a better income for the individual.	U.S. Bureau of Labour Statistics 2011
Higher education success is directly proportional to the country's economic growth and development.	(Pavel, 2012)
Higher education is globally viewed as a lucrative industry.	(Verger <i>et al.</i> , 2016)
Higher education is responsible for generating jobs and occupations, like engineers, health specialists, teachers, policymakers, technologists, and scientists, whose knowledge and leadership are required to improve people's lives.	(Roberts and Ajai-Ajagbe, 2013)

2.3.2 Goals of Higher Education

Before discussing higher education goal, the researcher finds it important to define the term goal and how to relate it to the research topic. Merriam Webster dictionary state a straight forward definition for the term "goal" as the terminal

point of a race. Similarly, goal in management terms represent where an organisation or an individual wants to be.

According to Robarts and Ajai-Ajagbe, (2013), higher education's prime goal is to contribute towards sustainable human development, as they noticed a direct relationship between sustainable development and the higher education sector. The more specific aims of higher education are mentioned in a paper by Number, (2013), includes; meeting the learning requirements and aspirations of individuals through developing their intellectual abilities and skills throughout their lives; addressing the development needs of society and supplying a sufficient number of individuals for the labour market, in a knowledge-driven, knowledge-dependent society, with the ever-changing high-level competencies and expertise necessary for the growth and prosperity of a modern society; contributing to the socialization of enlightened, responsible and constructively critical citizens; and contributing to the creation, sharing and evaluation of knowledge.

In an action report Johnston, (2007), higher education was related to sustainable development since the concept of sustainable development was originally introduced at the first Earth Summit in 1972 in Stockholm, during which government representatives and nongovernmental organisations identified education as necessary for the successful achievement of sustainable development. According to this report, higher education influences graduates, who go on to become the leaders of their communities, organisations and countries. For this reason, education is considered fundamental to the strategy for achieving sustainable development.

According to Johnston, (2007), HEIs have two main missions. First, they serve as a link between knowledge generation and the transfer of knowledge to the community through individuals to prepare them to enter the labour market. Such preparation includes the training of teachers, who play a pivotal role in providing education at both the primary and secondary levels. The second main mission is that they dynamically contribute to societal development through offering outreach and services to community.

Cortese, (2003) highlighted that HEIs shoulder an insightful, moral obligation to increase the awareness, knowledge, skills, and values needed to create a healthy, sustainable future. Higher education often plays a critical but often overlooked role in making this vision a reality. It prepares most of the professionals who develop, lead, manage, teach, work in, and influence society's institutions. Thus, HEIs have a critical and tangible role in developing the principles, qualities and awareness not only needed to preserve the sustainable development philosophy, but also to improve its provision. A change in education management is needed to meet the increasing needs. According to Farinha *et al.*, (2017), certain competencies are needed by tomorrow's business professionals so several HEIs have initiated creative projects that have transformed campus life and impacted on the staff and students' attitudes and behaviour.

Despite the important missions mentioned above, the researcher believes that these are largely ignored not only by other beneficiaries i.e. parents and students, but also by the HEIs' shareholders and higher education governing authorities. In addition, the authors believe that the strategies set by United Nations and its sub-organizations do not tend to be supported by policies and action plans. Table 2.5 outlines the literature that discusses the goals of higher education.

Table: 2. 5 Different goals of higher education (Literature summary)

Higher Education Goals	Reference
To contribute to sustainable human development.	(Robarts and Ajjai-Ajagbe, 2013)
To achieving the learning requirements and aspirations of individuals through developing their intellectual abilities and skills and addressing the development needs of society.	(Number, 2013)
To increase the awareness, knowledge, skills, and values required for a healthier society.	(Cortese, 2003)
To develop the principles, qualities, and awareness needed to preserve a sustainable development philosophy and improve its provision.	(Farinha <i>et al.</i> , 2017)

The above table clearly shows that, although the goals of higher education may appear to be universal, different individuals and society might set different goals according to their understanding and capabilities. Therefore, a deeper examination might expand the vision of setting higher education goals to different levels of beneficiaries.

2.3.3 Factors Affecting Higher Education

The role of education in driving aspects of society, like demography, has been extensively mentioned by academics. For example, Lutz and Skarbek, (2017) highlighted that education impacts on the quality of life in society. Likewise, the researcher believes that the higher education sector, like any other sector, is affected by its surrounding environment so, if the body of higher education is affected, then the set goals and mission will be affected as well. Asaduzzaman *et al.*, (2014) argues that a set of external factors, such as political, economic, legal, demographic, and infrastructure, affect the quality of higher education in Bangladesh, so the Bengali government has developed a Higher Education Strategic “Plan, 2006” which was fully home-based, with the participation of front-line academics from both public and private universities and representatives from think-tanks and the private sector.

Consequently, according to Hossain, (2017), the Ministry of Education, with the aid of the World Bank, has embarked on a Higher Education Quality Enhancement Project (HEQEP). The project aims to improve the quality of

teaching-learning and research capabilities of the HEIs through inspiring both innovation and accountability and enhancing the technical and institutional capacity of the higher education sector. The authors believe that, although these factors were wisely chosen, improving the quality of higher education is a hard goal to achieve simply because it is difficult to define quality let alone measure it. In addition, the authors see quality as a characteristic of the product which must be defined through goals.

The ideal learning environment highly depends on the specific learning objectives and the specific target group. For example, Western countries' education shift from a behaviour-learning approach to a cognitive learning approach is discussed in the literature on learning theory (Donnelly, 2017). Similarly, a shift from a teacher-oriented to a learner-oriented approach has occurred due to the above-mentioned shift. In agreement with these shifts, there is increasing interest in the development of cognitive skills competency enhancement. From the above, the researcher strongly believes that there is no generic ideal learning environment, but it should serve the objective of learning and must suit the nature of the targeted learners.

In a study on the effect of demographics on higher education Murdock, (2018) argues that the possibly significant changes in the US population will influence the future educational requirements and facilities there. The most important changes relative to the magnitude of their potential impact are: the decline in the rate of population growth, the aging of population and the increase in the number and proportion of members of minority groups in the US. These factors have been shown to have a marked impact on demographic, socioeconomic, and service factors (Juvonen, 1995). This shows how environmental factors shape the higher education sector.

Another factor affecting higher education is socioeconomic status. According to Johnson et al., (2016), there are several external environmental factors that affect education performance, including: socioeconomic status, geographical location, ethnicity, gender and school type. They claim that the social and economic status of students and their families highly affect their performance in

education. Likewise, the researcher believes that the same factors may affect the higher education sector in general as well as performance.

In important research, Kyvik and Stensaker, (2013) highlighted several factors that affect strategic changes within HEIs, including leadership, communication, cooperation with academics, emphasis on the decision-making process, and a supportive financial climate. The study showed that the government strategies regarding higher education are not reflected in the HEIs' policies. This phenomenon is what the researcher is trying to explore through assessing the role of governance in shaping the higher education sector. Table 2.6 summarises the factors affecting higher education as outlined in the literature.

Table: 2. 6 Factors Affecting Higher Education (Literature summary)

Factor	Effect of higher education	Reference
Culture	Higher education can and will change the quality of life of individual and, in turn, society through developing the intellectual capabilities of the recipient of higher education.	(Lutz and Skirbekk, 2017)
Political, economic, legal, demographic, and infrastructure	Improve teaching and learning quality, enhance research capabilities, and inspire both the innovation and accountability of individuals.	(Asaduzzaman, 2014)
Demography	Changes in the US population will influence future educational requirements and facilities.	(Murdock ,2018)
Socioeconomic status, geographical location, ethnicity, gender	Affect their performance in education.	(Johnson <i>et al.</i> , 2016)
leadership, communication, cooperation with academics	Affect the decision-making process regarding higher education.	(Kyvik and Stensaker, 2013)

Based on the above, scholars and academics have agreed on set of external factors that influence higher education for both individuals and society. From this stance, the researcher strongly believes that assessing these factors is imperative for policies and decision-makers when shaping higher education goal from either an individual or collective perspective. This has inspired researchers to analyse and explore some of the well-established managerial tools used to assess the external environment of higher education in order to develop a frame of reference that considers the external environment when shaping higher education goal.

In order to have a solid analysis of the environmental factors influencing higher education, the researcher reverted to a comparison between extant managerial assessment tools that analyses the environmental factors in order to select the most suited tool to be modified and used as a moderator when constructing the conceptual framework. The following section will present three analysis tools widely used in environment analysis.

2.4 Strategic Analysis Models

From the above-mentioned literature, the authors believe that, to analyse and assess the influence of the strategic environment on a country's higher education sector, an efficient tool is required to analyse and understand the effect of the influential factors mentioned in the literature that shape the goal of higher education. For that purpose, three well-established strategic managerial tools will be discussed from a theoretical perspective to select or modify the one best suited for this topic. SWOT, PESTLE, and the value chain model will be briefly discussed and compared.

According to Qehaja *et al.*, (2017) the use of strategic tools in organizations is fundamental to creating and developing strategies. For that, this research will discuss the academic background and practical implications of the three aforementioned tools, illustrating their strengths and weaknesses. In addition, the researcher will discuss the relationship between these managerial tools and higher education in the extant literature to extract potential contributions and address the gaps in order to develop further the conceptual proposed model of this thesis.

2.4.1 SWOT Analysis Model

The origins of the SWOT analysis tool were developed by Albert Humphrey in the 1960's and 1970's, using data from many of the major companies at that time. SWOT is the mostly widely-used analysis tool regarding business activities. It starts by developing the objective of the organization or entity and recognizes the internal and external factors that are significant in achieving the above-mentioned objective.

A SWOT analysis usually precedes strategic planning and is conducted by experts who can assess the organization from a critical internal perspective (Gibis *et al.*, 2001). The concerned panel could be senior leaders, or board members at any managerial level. The assessment is usually based on examining measures, statistics, or organizational key performance indicators, on which the panel will base its opinion and findings. A SWOT analysis entails an examination of an organization's internal strengths and weaknesses, its

opportunities for growth and improvement, and the threats that the external environment presents to its survival. A typical form of SWOT analysis is shown in figure 2.3 below.



Figure: 2. 3 A typical SWOT analysis template (Gibis et al., 2001)

Although a SWOT analysis is considered one of the devices of strategic planning, that enables decision-makers to assess the strengths, weaknesses, opportunities and threats involved in any organisation (Hinton, 2012), (Hashemi, 2017) claims that a SWOT analysis plays an important role when planning for the stability of the organisation. The researcher strongly believes that, even when addressing the internal environment, a SWOT presents a clear picture of the organisation's strengths, weaknesses, opportunities, and threats, but does not investigate the external environment, except when assessing opportunities and threats.

Strengths and weaknesses are usually internal to the organisation, while opportunities and threats are usually external. A SWOT analysis is a predecessor to strategic planning and decision-making and is performed by a group of experts who can assess the organization from a critical perspective (Gibis *et al.*, 2001). In this research, SWOT will be assessed as strategies generating aid that start by defining the desired objective of an organization. A SWOT analysis is

then implemented to assess possible strategies, weaknesses, opportunities, and threats in order to develop a strategy for achieving the desired objectives.

Based on the above, the researcher believes that there is a major shortfall regarding SWOT analysis, as it is more oriented toward the internal environment and its effect on the strategic planning and decision-making process that does not allow the decision-maker to make comprehensive decisions. The next section discusses another strategic analysis tool which focuses mainly on the external environment.

2.4.2 The PESTLE Analysis Model

Unlike a SWOT analysis, which is seen as a micro analysis tool, the PESTLE analysis tool, developed by Aguilar in 1967, is considered a macro environment analysis tool used to examine in-depth the impact of political, economic, social, technological, legal and environmental factors on the organization (Newton, 2014).

According to Rastogi and Trivedi, (2016), a PESTLE analysis tool is seen as a strategic management tool that can be utilised effectively in the external risk identification process of Risk Management Planning. It pinpoints risks from political, economic, social, technological, legal, environmental aspects.

PESTLE is a strategic planning tool used to assess the influence of political, economic, social, technological, environmental and legal factors on an organisation. It investigates an organization's external environment prior to the commencement of a project. It allows a comprehensive view of the surroundings. A PESTLE Analysis is a logical tool for strategic decision-makers that offer many advantages and disadvantages. Some of its advantages include simplicity and easiness to comprehend and utilise, its ability to help to understand the environment better, its promotion of strategic thinking, its ability to reduce the effect of future threats, and its ability to facilitate the anticipation of future difficulties.

On the other hand, a PESTLE analysis is not perfect and, according to Rastogi and Trivedi, (2016), it suffers from numerous shortfalls like over-simplifying the collected data, its need for continuous updating due to the changing

environment, the necessity of accessing data sources which is not always feasible, and the possibility of being swamped by a huge amount of collected data.

According to a study by Ho, (2015), a PESTLE analysis can contribute to strategic planning and decision-making through informing strategic decision-makers about changes and development (CIPD, 2014), identifying the key drivers utilised in war gaming exercises (Johnson *et al.*, 2009), the provision of important information to support internal analysis (Fleisher and Bensoussan, 2015), maintaining organisational awareness and providing valid assumptions for a company's strategy development (Fleisher and Bensoussan, 2015). Having said that, a PESTLE analysis and any of its subsequent forms rely on the managers' ability at various levels to see and observe the environment as well as their capability to collect and analyse the relevant data to enable the analysis to be conducted (Fleisher and Bensoussan, 2015).

A PESTLE analysis can take many shapes and forms depending on the requirements and nature of the analysis to be conducted, which makes it flexible and versatile. Figures 2.4 and 2.5 show some of these versions.

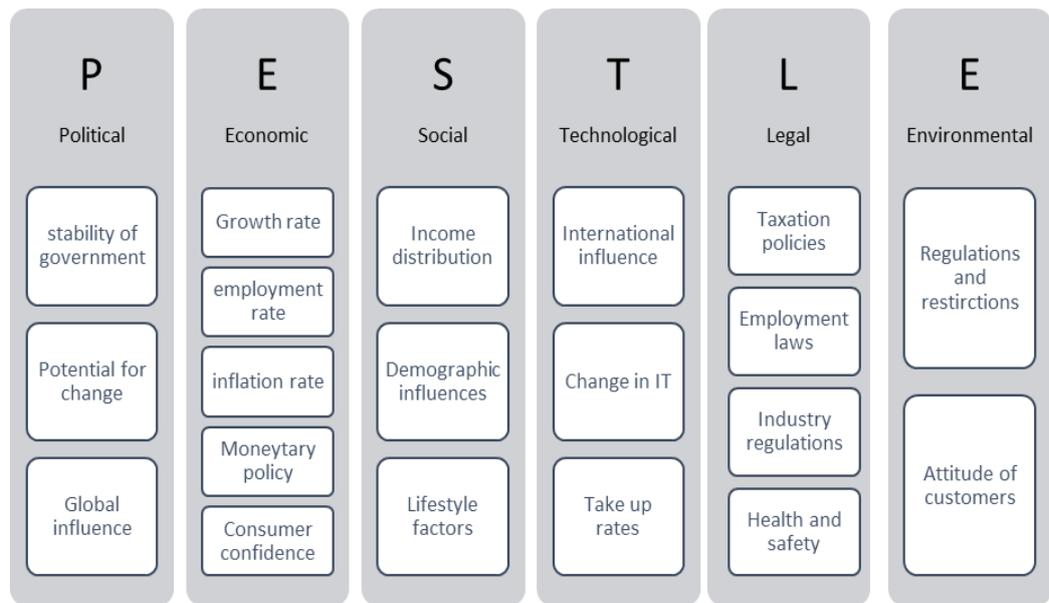


Figure: 2. 4 PESTLE model sub-elements (Blackburn, 2016)

In addition to the above PESTLE analysis tool, there are several common variations of PESTLE analysis, with some using more factors and some using less, depending on the nature and magnitude of the analysis, but some of the factors remain constant because of their importance, regardless of the nature of the organisation environment to be assessed.

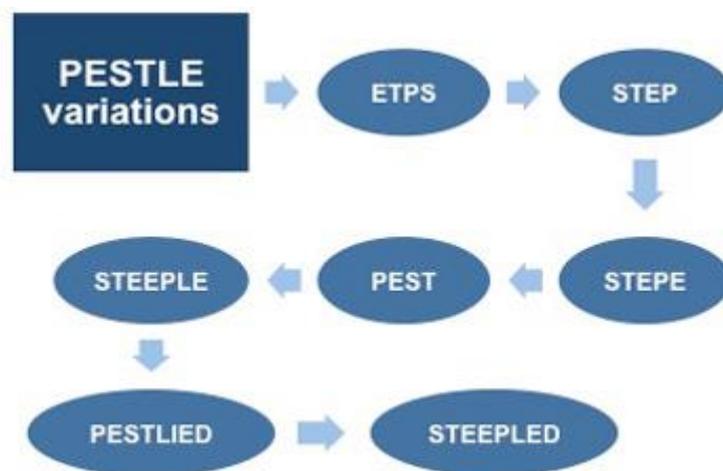


Figure: 2. 5 PESTLE analysis variations (free-management e-books)

Table 2. 7: PESTLE Versions (Source: <http://www.free-management-ebooks.com/faqst/pestle-01.htm>)

Version	Breakdown
ETPS	Economic, Technical, Political, and Social
STEP	Strategic Trend Evaluation Process
STEPE	Social, Technological, Economic, Political, and Ecological
PEST	Political, Economic, Social, and Technological
STEEPLE	Social, Technological, Economic, Ethical, Political, Legal, and Environmental
PESTLIED	Political, Economic, Social, Technological, Legal, International, Environmental, and Demographic
STEEPLED	Social, Technological, Economic, Environmental, Political, Legal, Educational, and Demographic

PESTLE analysis data can be collected through open sources and are usually evaluated and analysed by concerned personal. This tool will best aid decision-making if it is linked to objectives set by the managers. This tool is not bullet-proof, as it suffers from certain limitations, like the rate of change of external factors and the enormous amount of information required to conduct the analysis. For this research, the authors believe that this tool is preferable to a SWOT analysis, since it is macro in nature and broader in perspective.

2.4.3 Value Chain Model

The third and final tool is value chain (VC) analysis. Porter introduced the generic value chain model in 1985. The value chain represents all the internal activities in which a firm engages to produce goods and services. A VC consists of primary activities that add value to the final product directly and support activities that add value indirectly. It is a strategy model used to analyse an organization's internal activities. Its aim is to identify the weakest activities, so that these can be improved to deliver a competitive advantage.

According to Kogut, (1985) and Kaplinsky and Morris, (2001), the VC approach focuses on the basic activities that are required to bring a product or service from concept, through production and delivery to the end user and finally to the disposal phase. Consequently, every higher education beneficiary has a role in

the VC model, as the suppliers provide inputs before passing them on to the customer. Kaplinsky and Morris, (2001) asserted that production is only one of several value links in the VC approach, adding that there are many other activities within each ring of the chain. For example, activities in one ring of a VC are influenced by the outputs of the previous ring and similarly the output of this ring will affect the next one. From the above, using the VC requires a holistic understanding of all links' activities and their interrelationships.

In addition, the VC approach is motivated by a functional business perspective to assess the costs and benefits and considers the added-value as a basis for competitive comparisons (Brown, 2009). For this research, the VC approach is adopted in order to assess the relationship between the different links of the chain in order to understand how the output of one link affects the input of a subsequent link (Lenz, 1997); (Raikes *et al.*, 2000). This assessment allows the researcher to identify the factors of the process environment and its effect on the subsequent stages through analysing the interactions' different phases (Kaplinsky and Morris, 2001; Grundmann and Kimmich, 2008).

Moreover, a VC provides a framework in which the production, processing, and sale of product or service are operated and analysed comprehensively (Porter, 1985). The alignment of all beneficiaries' goals is crucial in the VC model because each goal depends on other b costs and beneficiaries' benefits until a final product or service is produced or provided. A VC integrates the full set of activities needed to deliver a product or service, and it is vital to remember that the chain is only as strong as its weakest link. Figure 2.6 below shows Porter's model of the VC.



Figure: 2. 6 Porter's Value Chain Model (Jurevicius, 2013)

This means that, by examining internal activities, the analysis reveals where an organization's competitive advantages or disadvantages lie. According to (Dorri *et al.*, 2012), Porter's model was used to analyse the internal aspects of higher education, but they highlighted that the external aspects need to be analysed as well. For this reason, the authors believe that such a model will fall short of the intended aim.

2.4.4 Analysis Tools Comparison

The above section discussed in detail three strategic analysis tools, outlining their strengths and weaknesses. Through reviewing the literature, the researcher compared the three different tools to select the one best suited for the current research purpose. Table 2.5 below presents a comparison table of the three above-mentioned analysis tools.

Table: 2. 8 Analysis tools comparison (Author)

Tool	SWOT	PESTLE	Value chain
Year established	Albert Humphrey in the 1960's/1970's	Aguilar in 1967	Porter in 1985
Scope	Micro	Macro	Micro
Aim	Generate a strategy	Analyse the environment	Define weaknesses
Benefits	Business strategy planning	Gaining useful information on the business macro-environment (Peng and Nunes, 2007)	Provide insights regarding a concern (Kaplinsky, 2000)
Limitations	Irrelevant and lacking in consistency (Hill and Wesbrook, 1997)	Needs a subsequent analysis tool (Peng and Nunes, 2007)	Requires a preceding tool to analyse the influencing factors (Kaplinsky, 2000)

From the above table, the authors concluded that, in order to build a conceptual framework, an analysis tool is required to assess the influence of the environment on the higher education sector in Bahrain. According to (Peng and Nunes, 2007), a PESTLE analysis will help to narrow down and prioritise the factors influencing the higher education sector. For that purpose, this researcher selects a PESTLE analysis as the closest fit to the purpose, since it is macro in scope, aims to assess the environment, and the most comprehensive. However, the authors will modify the tool to fit the higher education environment and ease its implementation by all concerned beneficiaries. Modifications to the tool include the emendation of certain factors like 'political' to 'rules and regulations' and adding the demographical aspect to the analysis tool named DICER, which will be described in detail later.

After reviewing three managerial assessment tools, the researcher concluded that higher education environment is a strategic macro environment that requires an assessment tool versatile and flexible enough to allow the researcher to modify according to the factors influencing higher education. For that, the researcher believes that PESTLE analysis can be used to assess higher education environment with necessary modification. Although PESTLE analysis tool is an

old managerial tool, it is still widely used in fields like education and health care. According to Aithal *et al.*, (2016) analysis tools are used to know the factors affecting the stage models and their constituent critical elements. Moreover, Aithal, (2017) pointed that PESTLE analysis framework is a useful method to identify the external factors that influence an organization. PESTLE describes the challenges and opportunities of the environment for its sustained operations based on Political, Economic, Social, Technological, Legal and Environmental factors. The next section will investigate some decision-making theories to be used in constructing the conceptual framework of the research.

2.5 Decision-Making Assessment Theories

After comparing some managerial assessment tools, this section will follow the same pattern in presenting the reader with three decision-making theories to be used in constructing the research framework. Studying and assessing decision-making processes is not new. It has been evolving, with contributions from several disciplines, for some 300 years. Such contributions have ranged from providing mathematical foundations for economics to routine applications in many areas, such as finance, medicine, military, and even cybernetics. Thus, decision theories have embodied several prevalent concepts and models, which exert a significant influence over almost all the biological, cognitive, and social sciences (Doyle and Thomason, 1999).

Pucciarelli, and Kaplan, (2016) provide a prescriptive guidance to higher education managers and policy makers. To this end, it proposes a SWOT (strengths, weaknesses, opportunities, threats) analysis illustrating key trends that will impact higher education and academia. Drawing from these trends, three significant challenges were identified that higher education institutions will face and that have important implications for research and practice. First, the need to enhance prestige and market share. Next, the need to embrace an entrepreneurial mindset. Finally, the need to expand interactions and value co-creation with concerned beneficiaries. The researcher will present three decision models to select the one best-suited to the conceptual framework.

2.5.1 Means-End Theory

The origins of means-end theory can be traced back to the 1930s, when Tolman pointed out the goal-oriented nature of human behaviour. According to Jiang, (2016) the concept of a means-end chain (MEC) has been widely used in marketing research to understand consumer behaviour. The first versions of means-end chains appear in the research of Howard, (1977); (Cohen, 1979) and (Hall and Lockshin, 2000). Howard, (1977) sought to build on Rokeach's work by relating terminal and instrumental values to choice criteria. He suggests that the total meaning of a brand resides in a hierarchically organised set of consumers' categories based on their semantic properties, rather than consumers' evaluation of these categories. Choice, on the other hand, is an evaluation based on the terminal and instrumental values suggested by Rokeach.

The theory has three major components. The first component is a set of attributes or characteristics of products or services designed by producers and service providers and sought by consumers, which represent product/service knowledge. These attributes help the customer or consumer to achieve the next component of the theory. The second component of the theory is the collective benefits that customers acquire using products or services to achieve personal goals. Benefits usually reflect the perceived costs and positive outcomes associated with specific attributes. The intensity of a customer's feelings and behaviour is related to the desirability of the focal goal. The last and final part of the theory is goals which are not expected to change drastically in the short run. A person cannot attain her/his goal completely but can make incremental achievements throughout her/his life. At the end of every action that is directed towards a goal, an individual evaluates the outcome.

Various researchers have approached this model from different perspectives. Below, the researcher investigates some of the prominent studies linked to each approach. According to Posey *et al.*, (2017), who reflected on earlier literature that defined goals as a desired end-state of an action and elaborated on the definition of goals by Parvin in 1989 who defined goal as "a mental image or other end point representation associated with affect toward which action may be directed".

According to the above-mentioned definitions, goals offer the principal motivational and directional influence for people's behaviour (Xiao *et al.*, 2017). Goals affect and orientate the direction of behaviour through expressing what people want to achieve and, in general, how they are planning to attain the goal and why they are pursuing a certain path to achieve it. This goal-directed behaviour model has been widely used to explain consumer behaviour. (Pieters *et al.*, 1995), claim that a more beneficial means of assessing goal-directed consumer behaviour is to view it as a hierarchical model of action to facilitate accomplishment.

Although the goal hierarchical approach is widely-accepted in the literature on marketing, psychology, and even information systems, the researcher argues that the hierarchical approach sometimes detaches the goal from the behaviour if these are not set by the same people. For example, if parents set a higher education goal for their children, they cannot control their children's behaviour to achieve that goal. For that reason, a goal must be aligned across the spectrum of beneficiaries for it to be achieved.

Jeng and Yeh, (2017) presumes that means-end theory beneficiaries' behaviour is goal-oriented and that the goal structure can be embraced by all levels of beneficiaries. Gutman developed Means-End theory to understand the consumer decision-making process by connecting products/services attributes, the benefits of using products/services, and the personal goals or values that can be achieved by using that product/service.

According to Reynolds and Gutman, (1988), attributes represent the tangible characteristics of a product/service, the benefits attained through a set of attributes, and the goals that motivate and guide behaviour. Means-end theory's major assumption is that consumers are likely to select products/services that are more relevant for achieving their personal values, but the researcher strongly believes that, since attributes are more obvious and tangible, then consumers are more likely to be occupied by them. It is true that the means-end approach focuses on the cognitive relationship between the attributes of product/services (means), the benefits of these attributes, and the goals (ends) that these benefits attain.



Figure: 2. 7 Means-end Theory (Author)

2.5.2 OODA Loop Theory

The OODA loop (Observe, Orient, Decide, and Act) is a model that was created by USAF Col. John Boyd in the 1960s. It was originally designed for Korean-era fighter pilots to understand conflict and provide military leaders with a model or method for making decisions and then assessing their impact. The execution of the decision-making process may be viewed as involving the cycling through of four distinctive but interdependent stages: 1) OBSERVATION, or absorbing information from the environment by all possible means; 2) ORIENTATION, or placing this information into a matrix of human understanding and experience; 3) DECISION, or selecting a subsequent course of action based upon the likelihood of either offensive achievement or defensive nullification; and 4) ACTION, or attempting to operationalize or implement the previously-conceived decision. Collectively, these stages have become known as an OODA loop.

Although the OODA loop model was designed for military purposes, recent literature such as (Punia *et al.*, 2014) utilised it to develop software as a dynamic risk assessment tool. Punia *et al.* argue that the OODA loop can be broken down further in each of the four phases. They claim that the observation phase construct of the four major factors includes external data, changes in the environment, changes in behaviour, and changes in policies. This is like analysing the external environment via conducting a PESTLE analysis.

Another academic who saw the advantages of implementing the OODA loop within management was Jeffreys, (2016), who believed that the orientation

phase is utilised to reflect and assess the information collected during the observation phase and helps individuals to decide what needs to be done. A key aspect of this phase is to distinguish between what is important and what is not, depending on experience.

Returning to Punia *et al.*, (2014) they argue that the decision phase of the loop's emphasis is on choosing the most suitable strategy and aligning it with the goal of the whole project and any other external implicit guidance. Likewise, (Jeffreys, 2016) points out that, during the decision phase, one must consider three things; the information fed from the previous phase, any implicit guidance, and the consequences of any decisions taken.

The fourth and final phase of the loop is concerned with action. This was discussed by a study on military intelligence by (Mitchell, 2016), who agrees with (Punia *et al.*, 2014) and (Jeffreys, 2016), arguing that the action phase is merely operational in nature and must include testing the decisions taken in the previous phase as well as how these may affect the external environment.

The OODA loop has been employed as an effective tool by the US Department of Defence to build an adaptable fighting force. The premise of the model is that decision-making is the result of rational behaviour, in which problems are viewed as a cycle of Observation, Orientation (situational awareness), Decision-making, and Action. It has also been used by Intel, Nokia and other corporations to create a competitive advantage in the marketplace. Since we constantly interact and interpret, our environment is in constant flux. Listening to what others say inside and outside our organization, observing the changing market conditions and our interaction with or response to those changes all demand leadership and organizational agility. Figure 2.8 illustrates the model.

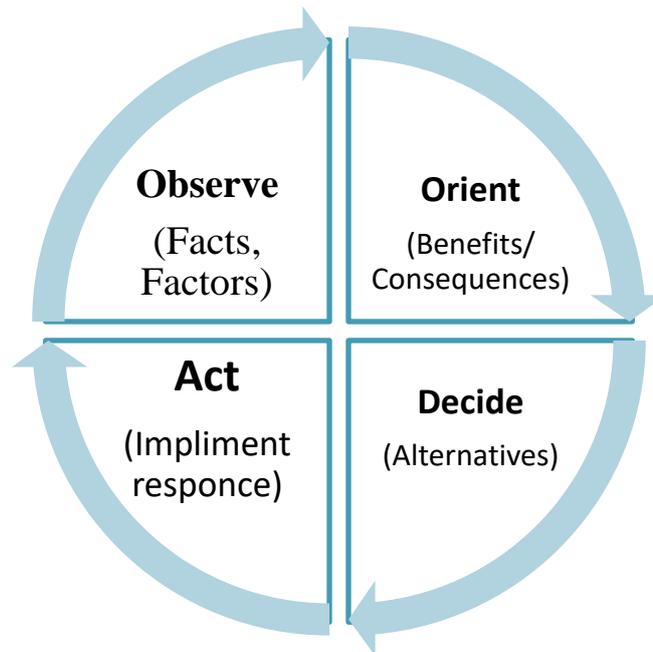


Figure: 2.8 The OODA Loop Model (Author)

2.5.3 Simon's Decision Approach

The process of decision-making is an important tool in assisting individuals to select an alternative and turn it into a decision. The essence of this process was described by Herbert Simon in a model developed in 1960, in which he divided the process into three phases or steps, as shown in Figure 2.9 below. The first step or phase is the intelligence phase, where data on the topic or issue are collected, analysed, and tested in order to identify the situation which requires a decision to be made. The next step in Simon's model is the design phase, where the decision-maker invents, develops, and analyses the different available alternatives before testing the profit and feasibility of implementing each one. The third step in this model is the choosing phase, in which the decision-maker selects the best alternative, as identified in the previous phase, and turns it into a decision ready to be implemented.

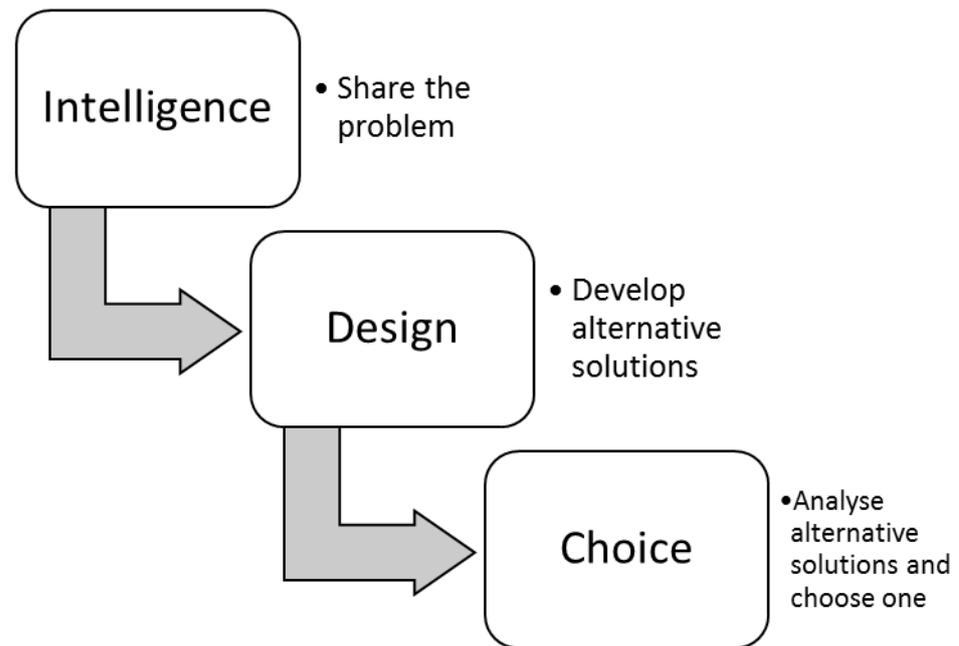


Figure: 2. 9 Simon's Model of Decision-Making (Author)

Although the model seems to be simple and easy to implement, it involves a considerable amount of work, especially in the intelligence and design phases. The model requires expertise to conduct the intelligence phase as relevant data must be collected and analysed prior to testing, which requires skills, practice and collective effort from different people with different backgrounds. Likewise, the design phase requires personnel with special skills and experience, who can create and develop logical alternatives for the decision-maker. Finally, while the choice phase or step may appear to be the easiest of the three, on the contrary, it is the most difficult, as it is based on the previous phases and will dictate the outcome of the whole process.

After reviewing the above-mentioned decision theories, it is important to compare them in order to assess the advantages and limitations of each theory and so select the most suitable one for this thesis. Costa *et al.*, (2004) discussed Means-End theory comprehensively, illustrating its virtues and shortcomings. They argue that it is a multidimensional model that can be approached using different techniques. (Rosen and Greenlee, 2001) emphasise that individuals are more captivated by attributes and consequences that value justifying why parents and students are more interested by the attributes of higher education institutions. On the other hand, the researcher believes that the values approach

is more suitable for strategic decision-makers simply because policy-makers at this level view the goals to be achieved as more important than benefits and attributes.

The OODA Loop theory, on the other hand, is more dynamic and robust. According to Middelfart, (2007), the more OODA loops an organisation creates the better it will be at adapting to its environment and the faster it will be able to become more competitive in addressing challenges and captivating opportunities to enhance performance. Based on this, the researcher argues that, if the nature of the OODA loop is adapted to the Means-End theory, it will gain greater flexibility and dynamic as well as speed and robustness.

Finally, the Herbert Simon model of decision-making, despite its simplicity, suffers from rigidity and is limited by the slow-changing environment which is the opposite of the high-speed competitive environment in which we live. For that reason, the researcher thinks that the Means-End theory, enhanced by the dynamic nature of the OODA loop, is the correct choice for the current research methodology.

To summarise, it is imperative to compare the three above-mentioned models in a table to illustrate their strengths and weaknesses and so simplify the choice of the best decision model that suits this research. Table 2.9 presents a comparison between the decision theories.

Table: 2. 9 Decision Models Comparison (Author perspective)

Model	Means-end	OODA Loop	Simon's Approach
Year Developed	Tolman, 1930s, (Howard, 1977); (Cohen, 1979); (Myers and Shocker, 1980); (Reynolds and Gutman, 1988)	John Boyd, 1960's	Herbert Simon, 1960
Aim	The means-end chain offers a micro psychological perspective of the role of personal values in consumption behaviour, which differs from macro approaches based on standard values (Reynolds and Gutman, 1988)	The OODA Loop facilitates fast, dynamic decision-making based on a specific input. (Boyd, 1976) argued that any fast-changing environment can benefit from applying the OODA Loop	Simon's Approach selects an alternative from among several choices and turns it into a decision
Scope	Depends on whether the perspective of assessment is goal-, benefit- or attribute-related	A model for decision-making and adaptive cognitive processes (Olsen, 2016)	A classic model that can be applied when time is not important in various management situations
Benefits	Investigates more the essence of the meanings that consumers associate with products or services (McGrath, 2010)	An open, complex, adaptive, process-oriented, inductive, open-ended and non-linear system that offers fast choices (Olsen, 2016)	Logical, simple and easy to follow steps.
Limitations	Requires face-to-face, individual, in-depth, or semi-structured interviews (Reynolds & Gutman, 1988)	Requires another analysis tool in order fully to understand the environment. (Olsen, 2016)	A long process that requires input from experts

2.6 Literature's Gap

In sum, the researcher argues that, although the body of literature on the topic is vast and multifaceted, there remain gaps that need to be addressed and further investigated. The table below presents some extant literature on the main topics

related to the research aim and objectives shading the light on its findings and potential further research. In addition, the table shows gaps on related topic.

Table 2.10 summarises the gap in the literature on the topic.

Table: 2. 10 Literature Gap Findings (Literature summary)

Topic	Findings	Gap
Importance of Higher Education	Kyllonen, (2012) argues that based on surveys, prediction studies, and studies focusing on 21st century skills, higher education skills are evolving and developing depending on the ever-changing environment. Moreover, Paval, (2012) noted that the widespread recognition that HE is a major driver of economic competitiveness in an increasingly knowledge-driven global economy made high-quality HE more important than ever before. In short, internationalisation is changing the world of education and globalisation is changing the world of internationalisation. (Knight, 2015).	Although extant literature highlighted the importance of higher education on many aspects, there is still need for further research to relate higher education importance to the goal of achieving human sustainable development and the need for a frame of reference to translate higher education importance to goals, benefits, and attribute in a decision-making process.
Factors Influencing Higher Education	Altbach, (2015) asserts that Every country needs to maintain essential control over its academic institutions. Becker <i>et al.</i> , (2017) named some factors to consider accelerating higher education. among these factors are access and convenience, redesigning learning spaces, advancing cultures of innovation, and deeper learning approaches.	Despite the importance of the factors mentioned in the literature, it slightly disregards the tangible environmental factors mentioned in assessment tool such as PESTLE. Analysis tools which I believe more important for policy and decision makers.
Higher Education Goal	Bowen, and Fincher, (2018) assert that higher education goals lack hierarchical organization and are not as simple or unidimensional as profit maximization, but it nevertheless operates with a quite definite set of goals that command widespread assent.	This literature clearly shows the need to identify and unify a goal for higher education to enable concerned beneficiaries achieve their individual goals that serve the state's goal.

2.7 Chapter Summary

This chapter has drawn together the literature on the higher education sector in general and higher education in Bahrain as a context, with a focus on the importance of this phenomenon to individuals and society. This chapter also addressed the goals of higher education from an academic and practical point of view for all concerned beneficiaries (HEIs personal, parents, and students) The

focus of this chapter was on identifying the external factors affecting higher education through exploring academic papers on the subject to select a managerial assessment tool suitable for applying decision theory. This chapter also studied the well-established decision-making theories required to reshape and reform the extant policies based on the local environment.

CHAPTER THREE-CONCEPTUAL FRAMEWORK AND RESEARCH PROPOSITIONS

3.1 Introduction

The previous chapter raised some issues that require further investigation. The main research issues derived from Chapter 2 underlined the following facts: (a) even though higher education goals are globally defined and recognised, they are generic in nature and require further investigation; (b) the literature review shed light on the relationship between higher education's goals, benefits, and attributes, but this relationship is mainly linear and lacks dynamics; (c) although it is perfectly normal for higher education's goals to differ from one individual to another, they should also be aligned with the prescribed goals set by the strategic decision-makers; (d) the examined literature shows that, while the benefits of higher education are generally the same worldwide and aim to achieve a satisfactory socioeconomic status, the attributes of HEIs may differ from one country to another according to external environment factors; and (e) the higher education sector in Bahrain is relatively small and new, which means that the related policies are constantly being revised and require reform.

The aim of this chapter is to develop a conceptual framework which, according to (Miles and Huberman, 1994), explains either graphically, or in narrative form, the main phenomena to be studied, the key factors, concepts or variables, and the presumed relationship among them. The researcher uses the critical analysis of the literature reported in the previous chapter further to analyse the area under study. Thus, to investigate these research issues further, this chapter aims to develop a conceptual framework for assessing the external factors that shape higher education's goals. The proposed conceptual framework is based on a well-established focal theory, with the addition of managerial analysis tools and decision theories to facilitate the concerned beneficiaries and policy-makers' decision-making.

The researcher will introduce the correlated relationship between the attributes of higher education and the benefits derived from those attributes and the external factors that lead to the goals of higher education. The conceptual

framework will be based on the focal theory. Means-End Theory is the most suitable due to the linkage between the input, process, and output of higher education and the comprehensiveness of this theory in covering the attributes, benefits, and goals of higher education. The proposed framework aims to offer a decision-making process to support concerned beneficiaries when making decisions regarding higher education reform. Additionally, the proposed framework can be used by practitioners and researchers to analyse the higher education environment externally. Furthermore, this chapter proposes and investigates the factors that influence the higher education environment, assesses higher education's benefits, and defines successful higher education's attributes.

3.2 Conceptual Framework Development

The proposed framework is subdivided into two main elements related to the factors that affect higher education's goal, benefits, and attributes. The first part comprises the external factors that influence the goals of the higher education sector, which include demography, infrastructure, culture, economy, and regulations. The rationale underlying the choice of these factors is further explained in later sections. The second part of the framework articulates the impact of the first part of the framework on higher education's goals, benefits, and attributes, constituting the novel contribution of this research on the conceptual level. These two main components were identified from previous, well-established managerial analysis tools discussed in Srdjevic *et al.*, (2012), (Brugha and Varvasovszky, 2000) as well as through further examination of the decision-making models referenced in (Fitzgerald *et al.*, 2016), (Brennan *et al.*, 2013).

3.3 Conceptual Framework Application in Higher Education

The application of Means-end Theory to the field of higher education is not new, as many researchers, such as (Psacharopoulos and Patrinos, 2004), and (Heckman *et al.*, 2008) have examined the benefits of higher education's aspects, particularly the economic one. In addition, some researchers have examined the same theory and its effect on higher education's goal-shaping,

such as (Fitzgerald *et al.*, 2016) and (Altbach, 2015), while others have explored the attributes of higher education within the context of Means-end theory to define their features and characteristics. This aspect was found in many academics' papers and reports, such as that published by the Middle States Commission on Higher Education in 2002 (Maragakis and van den Dobbelen, 2013).

Despite all the above-mentioned literature, the researcher argues that a more holistic framework, that aligns all the constructs of Means-end theory (goals, benefits, and attributes) will be a useful aid for beneficiaries when making their decisions. This was one of the main motivators behind the development of a conceptual framework that incorporates all the significant constructs of the focal theory and assesses the influence of external environmental factors on them using the prior research available on the managerial analysis tools and the theories of decision-making. As an entirety, the conceptual framework seeks to aid the concerned beneficiary, whether a higher education authority, student, or parent, to view, the whole picture when shaping the goals of higher education and consequently assessing its benefits and defining its attributes. The proposed framework uses a holistic approach to cover all the fragmented research studies which have been seen in isolation, attempting to unite them within a single framework. The process of developing the intended framework, shown below (Figure 3.1), consisting of the external factors influencing higher education goals in the context of Means-end decision making model.

A review of the existing literature as presented in Chapter 2 on the higher education sector in Bahrain, the importance of higher education, the effect of the environment on higher education, and how the constructs of the focal theory (goal, benefits, and attributes) are linked with higher education. In addition, the researcher intends to add a dynamic nature to the focal theory by adopting the OODA Loop. The figure below shows that there is a lack of comprehensiveness in assessing the higher education sector. Some of the findings in the examined literature cemented some of the researcher's ideas, while others led to thoughts which were incorporated significantly in the development of the framework.

Figure 3.1 depicts the development of the proposed framework, consisting of three key fragments or parts: an assessment of higher education's external environment factors, utilising a modified managerial analysis tool based on a PESTLE analysis, the impact of these factors on the goals of higher education and consequently on its benefits and attributes, and finally the adoption of the dynamic OODA Loop rather than maintaining a linear nature in the proposed framework.

Figure 3.1 below illustrates how the conceptual framework of this research was developed and presented. The rest of the chapter breaks down the component parts and links their development to the literature review presented in chapter 2. First, conclusions were drawn on how the environment affects higher education in many aspects, then the goals, benefits, and attributes were discussed. Finally, the question of how the adoption of the dynamic nature of the OODA Loop influences the flow of the framework is explored.

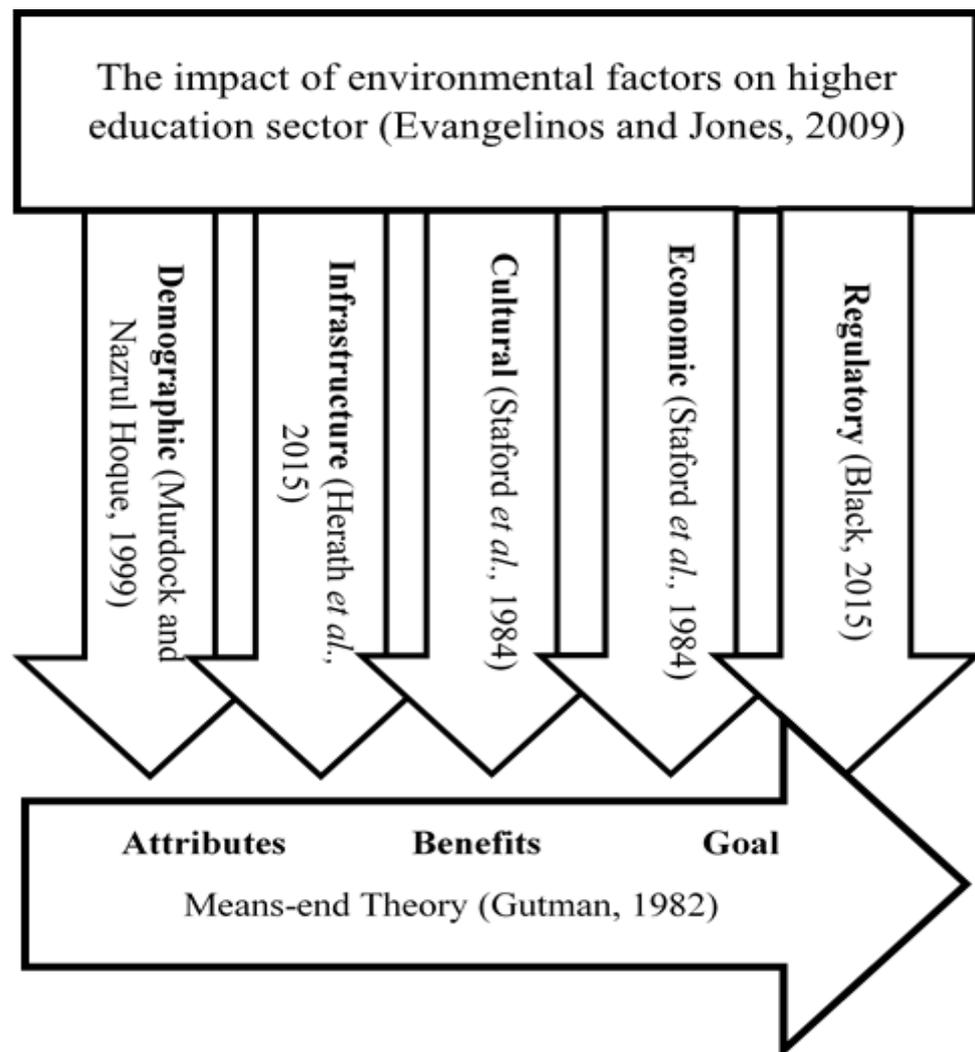


Figure: 3. 1 Conceptual Framework Development (Author)

As demonstrated in the conceptual framework, this research presents four propositions that influenced the idea of the framework. These propositions will act as guidelines to develop ideas to help in constructing the framework (Hodges, 2016). The research aims to assess these propositions using the most appropriate method, as shown in Chapter Four (Research Methodology), within the context of the public higher education sector in Bahrain. The four propositions are as follows:

- **Research Proposition 1:** The external environment determines the goals of higher education. The researcher identified several external environmental factors (Murdock ,2018); (Herath, et al., 2015); (Black et al., 2015).

- **Research Proposition 2:** Higher education's goals shape the attributes of HEIs. The researcher attempted to extract from the literature how goals are related to attributes in Means-end theory. (Maragakis and van den Dobbelsteen, 2013), (Brennan *et al.*, 2013).
- **Research Proposition 3:** The attributes of HEIs contribute to higher education's benefits. (McMahon, 2009), (McMahon and Oketch, 2013), who divided benefits into market and nonmarket, and individual and society.
- **Research Proposition 4:** Higher education benefits serve predefined higher education goals (Anitsal, 2007) outlined a definition of benefits, sometimes called 'consequences', arguing that the literature does not link benefits to goals, but the reverse is true, due to the hierarchical nature of the Means-end theory. Table 3.1 illustrates the research propositions alongside the research main questions.

Table: 3. 1 Research propositions' alignment with the thesis' questions

Research Propositions	Research Questions
The external environment determines the goals of higher education.	How do external environmental factors define Bahrain's higher education goal?
Higher education's goals shape the attributes of the HEIs.	
The attributes of the HEIs contribute to higher education's benefits.	Why is higher education important to Bahrain?
Higher education's benefits serve predefined higher education goals.	How does Bahrain's higher education goal align with higher education primary beneficiaries?

The conceptual framework offers a frame of reference that articulates a descriptive assessment that may need to be considered when assessing the higher education sector. The aim is to produce a framework that is generic and specific, depending on the level of adoption. In addition, it will provide a deeper understanding of the external environmental factors that may influence higher education's goals' decision-making process. Furthermore, it may help the

authorities to understand the real value that these tools can offer to decision- and policy-makers who seek to interact with other concerned beneficiaries.

3.4 Higher Education Environment's External Assessment

For this research, the researcher assessed the external environment of the higher education sector by undertaking a relevant literature review in Chapter Two and assessing the open sources available on the higher education sector in Bahrain, the research context. This assessment is based on a macro managerial assessment tool known as PESTLE analysis (see Chapter Two). This managerial tool addresses the influence of the external environment on an organisation or field (Marić, 2013). Due to the uniqueness of each higher education sector, the researcher elected to modify the analysis tool to ensure that it better served the aim and objectives of the study. The subsequent sections will illustrate how these environmental factors' assessment helped in developing the conceptual framework for the research.

3.4.1 Demographic factors

Previous studies noted that demographic factors have an impact on educational achievement (Lutz and Skirbekk, 2017); (Baker *et al.*, 2015). According to these studies, demographic sub-factors include socio-economic status, race, ethnicity, and age structure. For this research, the researcher elected five sub-factors of demography to assess their impact in shaping the goals of higher education. These sub-factors are; population size, gender ratio, average age of population, socio-economic status, and ethnicity. Figure 3.2 below illustrates how demography influences the shaping of higher education's goals.

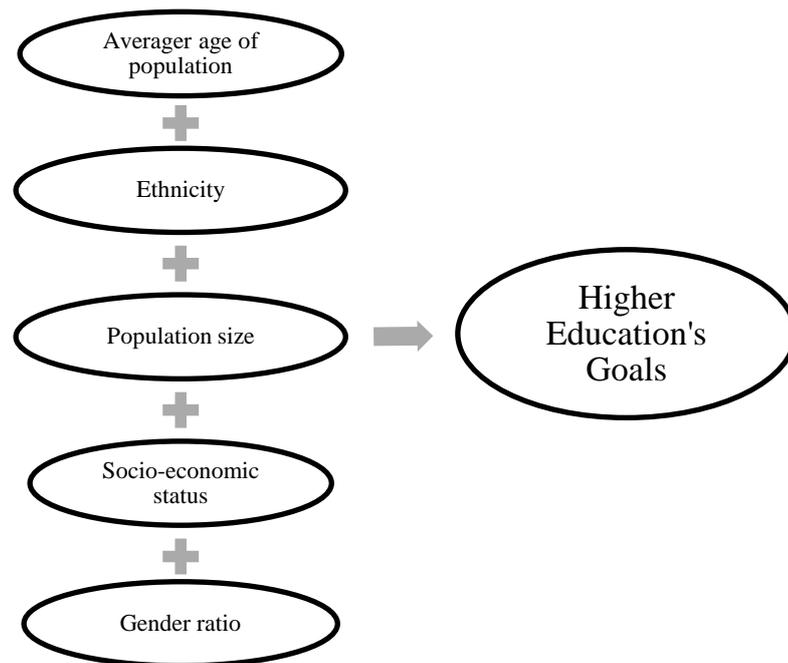


Figure: 3. 2 Effect of demography on higher education’s goal (Author)

3.4.2 Infrastructure factor

Based on the literature review, the researcher established a relationship between infrastructure as an external environmental factor that influences and shapes higher education’s goals. Authors like (Cohen and Bhatt, 2012) highlighted that the infrastructure has an impact on the outcomes of education. They named elements like examinations, curricula or curriculum frameworks, teacher education, and inspection systems. Although the above-mentioned elements are important, this research aims to address the strategic infrastructure.

Therefore, the researcher selected another set of infrastructure sub-factor that impact on higher education’s goals in Bahrain. These were: communication networks, digital literacy, road network status, and the status of basic education (pre-higher education). Figure 3.3 below describes the relationship between infrastructure and higher education’s goal shaping.

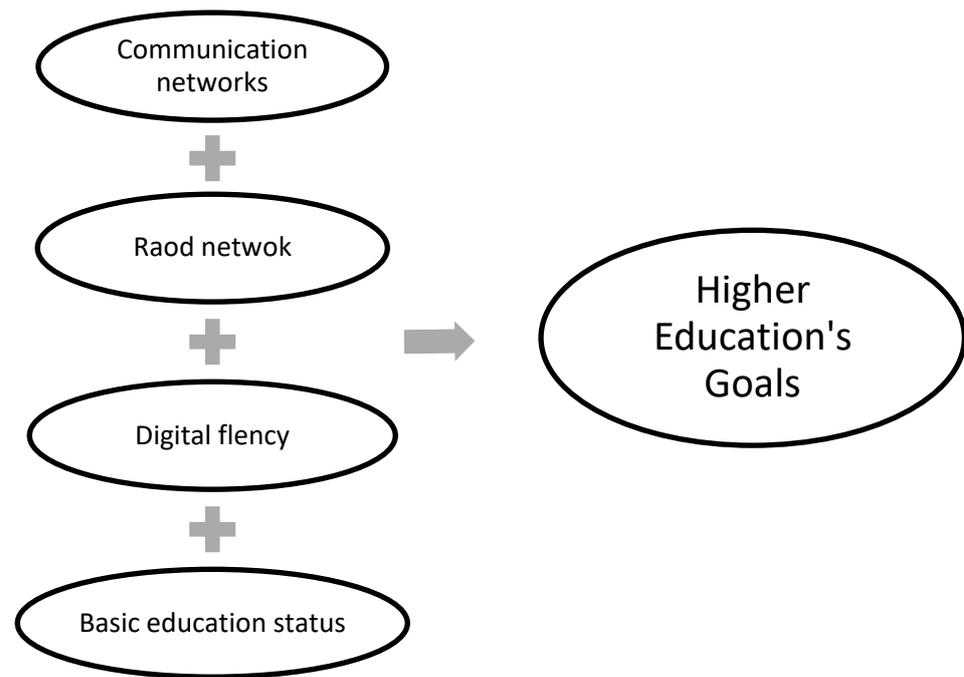


Figure: 3. 3 Impact of infrastructure on higher education’s goals (Author)

3.4.3 Cultural factor

Several studies examined the effect of social or cultural aspects on higher education enrolment, and their examination included several sub-factors related to culture that affected the higher education sector, such as attitude toward higher education. In an empirical study, Fomby and Cross, (2013) pointed out that students coming from instable families are most likely to have a negative attitude toward higher education than those coming from a stable family environment. Their findings confirm that students from instable families have less chance of enrolling and completing their higher education. As discussed earlier, this research addresses the strategic effect of culture on higher education and, for that reason, the researcher selected social values, attitude toward higher education, and norms and beliefs as the sub-elements of the culture factor. Figure 3.4 illustrates these.

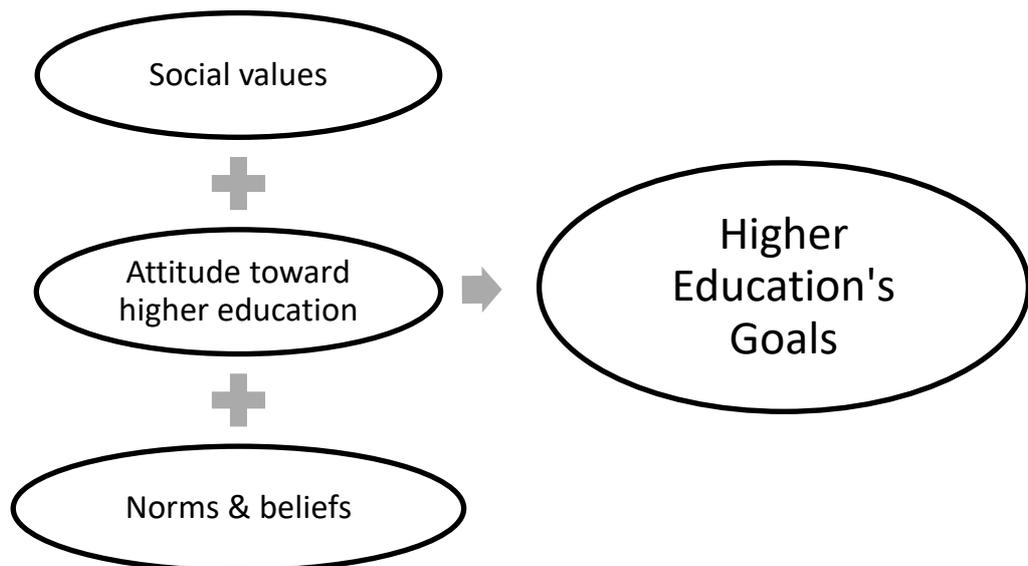
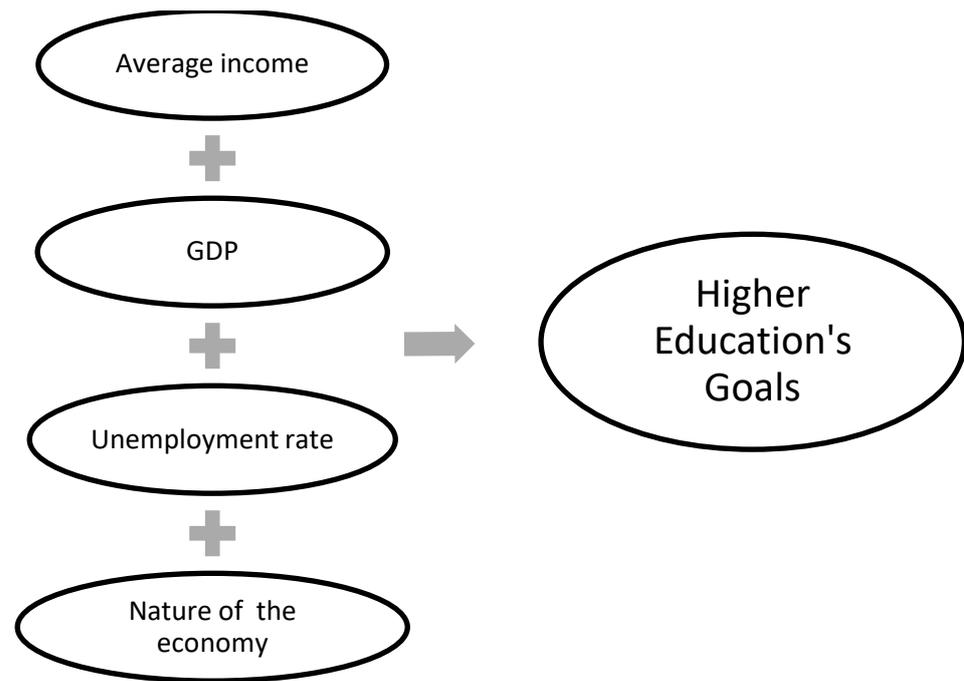


Figure: 3. 4 Effect of culture on higher education’s goals (Author)

3.4.4 Economic Assessment

Since higher education’s goals are globally related to economic growth and sustainable human development, economic factors must make a great impact on higher education’s goals. According to Marozau and Urbano, (2016), higher education has a great impact on economic development. Among these impacts are: the human capital generated by HEIs contribute to economic growth, research activity promotes innovation, and enhanced entrepreneurial skills positively impact on the gross domestic product (GDP) in innovation-driven economies. Considering this, the economic factor was sub-divided into four elements. These are: average income, GDP, unemployment rate, and the nature of the economy, as shown in Figure 3.5 below.



**Figure: 3. 5 Influence of the economy on higher education’s goals
(Author)**

3.4.5 Regulatory Assessment

The last of the external environmental factors shaping higher education’s goals is the regulatory factor. A study by Altbach, (2015) concludes that countries ought to preserve the right to govern HEIs but, at the same time, HEIs must have an adequate degree of autonomy and academic freedom in order to succeed and contribute to achieving higher education’s goals. The last factor believed to affect the goals of higher education is the regulations governing higher education in Bahrain. The regulation factor is divided into three sub-factors: Higher Education Council regulations, the Bahrain Quality Assurance HEI regulations, and HEIs’ internal regulations. Figure 3.6 below illustrates this.

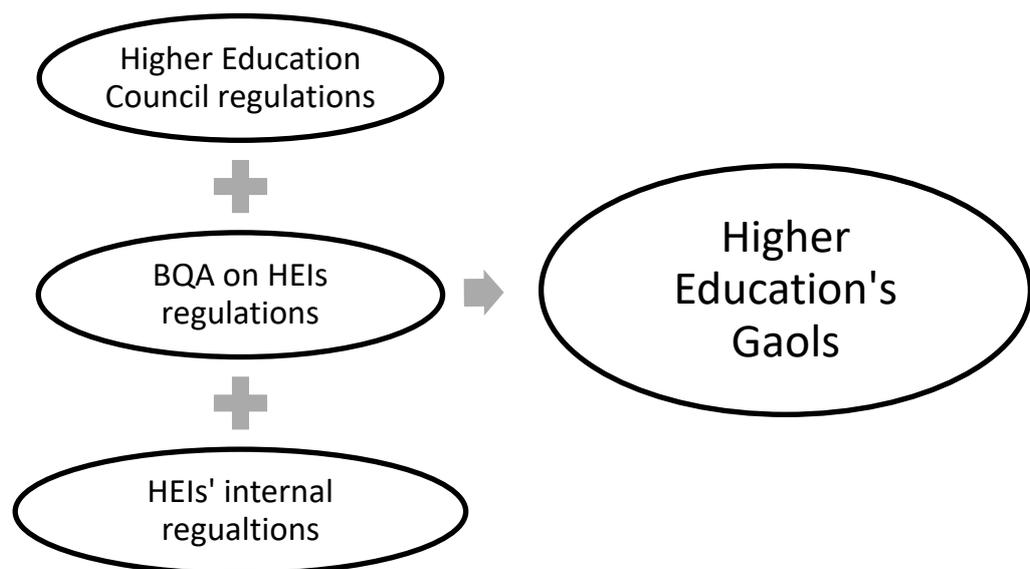


Figure: 3. 6 Impact of regulations on higher education’s goals (Author)

3.5 Contribution of the Framework

The proposed framework (see figure 3.7) highlights that the external environment has a significant impact on the decision-making process underlying higher education policy that shapes higher education reform. This, in turn, helps the concerned authorities and beneficiaries to make sound decisions regarding higher education’s goal, benefits, and attributes.

Likewise, the proposed framework constructs may also influence the choice of one HEI over another by parents and students alike, especially when they align the goals to the benefits of higher education. Nevertheless, the proposed framework could be further developed by adding the risk aspect to the decision-making theory, which is Means-end theory in this research.

The holistic proposed framework makes an important contribution to the body of knowledge by integrating the assessment of the external environment factors in the decision-making process, redefining the relationship between the Means-end theory constructs (attributes, benefits, and goals) from a hierarchical linear relationship to a dynamic continuous one, and finally applying the dynamic fast nature of OODA Loop theory to the framework enhanced the versatility of the

proposed framework, making it better suited to the fast paced changes taking place in today's competitive world.

The development of this framework is important because the extant literature does not clearly articulate how higher education policies and decisions are made. At this point, the primary contribution of the framework is to identify how external environment assessment is a vital step in the decision-making process. The conceptual framework in turn has two primary roles. One is assessing the external environmental factors related to the higher education sector in each place to shape the goals of higher education and the second is to relate the shaped goal to the benefits and attributes of a successful functioning higher education sector.

The framework was tested using the empirical data collected (see Chapters Five and Six). This evaluation both allowed the model to be refined and the development of a deeper understanding of how the various segments are linked together. In turn, the proposed framework will be revisited and further developed following the analysis of the collected data. The final version will be presented in Chapter Seven of this research. Following the development of the initial framework, the researcher, aided by the extant literature and experience, further developed the conceptual framework to show the impact of the sub-elements of each of the external factors on the goals of higher education to enable him to test these elements through the intended empirical study. Figure 3.7 below displays the conceptual framework of this study in detail.

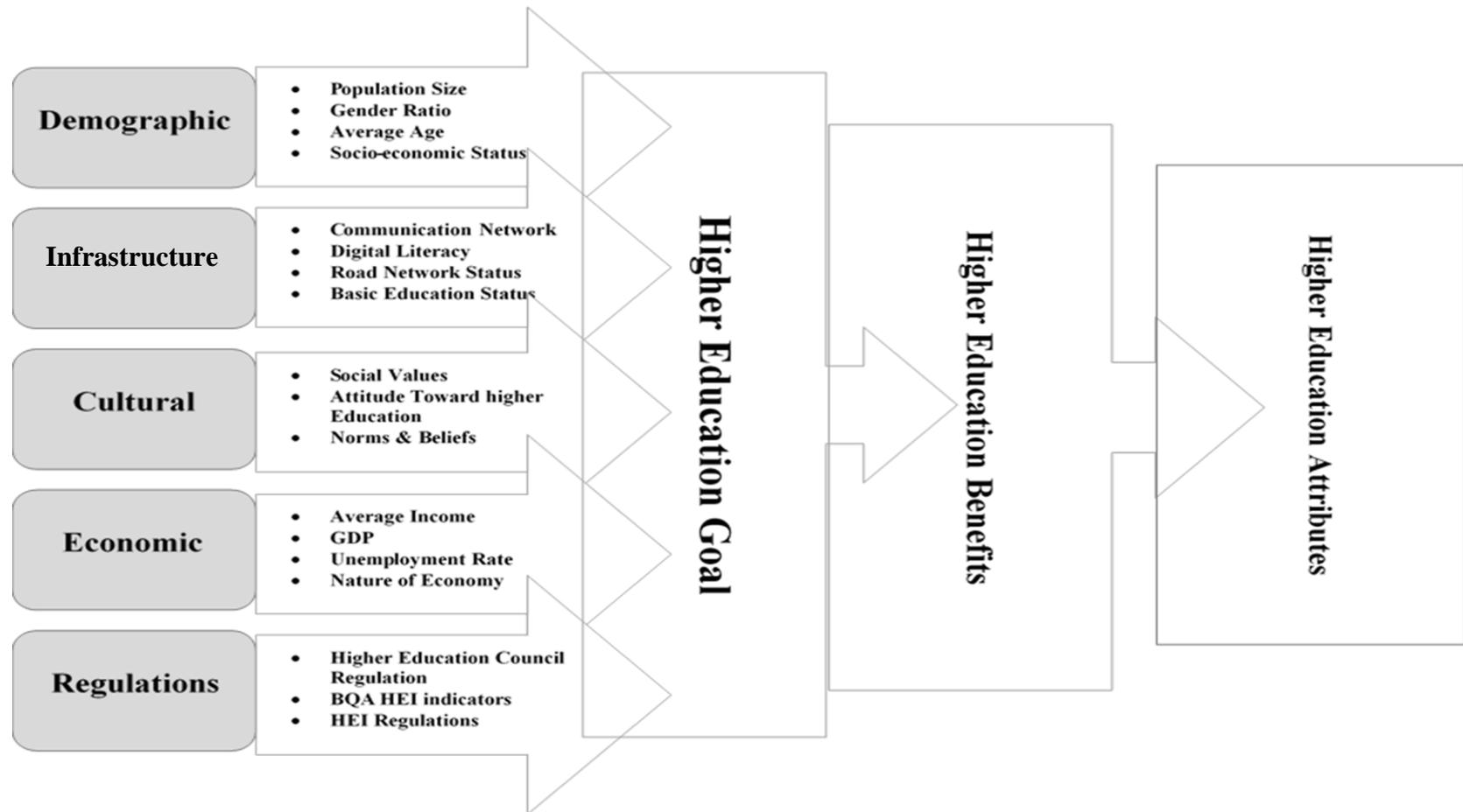


Figure 3. 7 Initial Conceptual Framework

3.6 Chapter Summary

The rapid growth of the higher education sector and continuous interest in this sector on both the individual and collective levels indicate that higher education is pivotal for sustainable human development. To identify the external factors that influence higher education's goals, this research extensively investigated well-established managerial analysis tools and defined five factors related to the focal theory of the research. These factors include demography, infrastructure, culture, economy, and regulations. Based on the previous literature reviewed and various variants of "PESTLE" analysis, these factors significantly shape higher education's goals.

The conceptual framework of this thesis proposes four major research propositions, shown in Table 3.1 above and later in Figure 4.2 of the next chapter, to identify the impact of these propositions on the relationship between the independent and dependent variables of the framework. The propositions also prescribe the relationship between the constructs of the focal theory of decision-making in this research, i.e. the goals, benefits, and attributes of higher education.

In addition, the researcher superimposed a more dynamic decision-making model, known as the OODA loop, onto the proposed framework to change the linear nature of the focal theory into a more dynamic, versatile framework and so enable the concerned beneficiary continuously to monitor and update the decisions made in accordance with the changes in the external environment or the modifications of the defined goals. Finally, the researcher intends to test the proposed framework empirically through employing a suitable research methodology, which will be discussed in the next chapter: Methodology.

CHAPTER FOUR-RESEARCH METHODOLOGY

4.1 Introduction

This chapter aims to explain the most appropriate methodology for achieving the research study's aims and objectives. The overall purpose of this research study was to assess the influence of external factors on a process as well as to extend the body of knowledge and understanding regarding higher education goals in the context of Mean-end Theory. Based on a review of the published literature, a theoretical framework and four research propositions were defined. To analyse the relationship between the goals of higher education and its attributes and benefits, the researcher will investigate the effects of external factors within the environment on defining the goals of higher education through conducting interviews with concerned beneficiaries.

This researcher adopted a qualitative data collection method using the interview approach and collected data using the focus group tool. The interview questions were created based on previously-validated research methods. The interview questions were designed to address the four research propositions and provide an outcome for the analysis of the findings.

Details of the methodology used in this research study are described in the following sections: Section 4.2 provides a philosophical perspective about this study; Section 4.3 outlines the research approach; Section 4.4 presents the research strategies and provides a justification for choosing case study strategy in the study; Section 4.5 defines the research method employed in this study; Section 4.6 justifies why the researcher selected a cross-sectional time horizon; Section 4.7 outlines the research design; Section 4.8 defines and explains the empirical research methodology; and, finally, section 4.9 concludes this chapter.

4.2 Research Philosophical Perspectives

Research philosophy is referred to as the development of knowledge and the nature of that knowledge (Saunders *et al.*, 2009). The development of knowledge can take the form of creating a new theory or answering a specific problem in a context. The research philosophy adopted to conduct research shapes the researcher's assumptions regarding the way in which the world is viewed. Based on these assumptions, the researcher can choose the most suitable research strategy and the methods as part of that strategy (Saunders *et al.*, 2009). There are two main assumptions, known as ontological assumptions and epistemological assumptions (Collis and Hussey, 2013).

Ontology is concerned with the nature of reality, while epistemology concerns what establishes acceptable knowledge in a field of study (Saunders *et al.*, 2009). The latter is the most significant philosophical assumption that guides the research (Myer, 1997). Epistemology is very important for any research, as it dictates the selection of an appropriate research strategy and methods to collect empirical evidence (Orlikowski and Baroudi, 1991).

There are three main epistemologies that researchers can use in research, labelled as positivist, interpretive, critical (Straub *et al.*, 2005). Positivists assume that reality is objective, can be described by measurable properties and is independent of the researcher's instruments, while interpretivists assume that social reality is in our mind, subjective and multiple (Collis and Hussey, 2013). In contrast, critical researchers tend to critically evaluate and transform the social reality under investigation (Orlikowski and Baroudi, 1991).

The following sections will provide further explanation of all four epistemologies and the relevance of each to this current study. The subsequent sections will be based on the research onion concept developed by (Saunders *et al.*, 2009), which offers a logical development of research methodology. Its advantage lies in its flexibility in following most types of research methodologies and its versatility in being implementable in different contexts (Bryman, 2012). Figure 4.1 shows an example of the research onion:

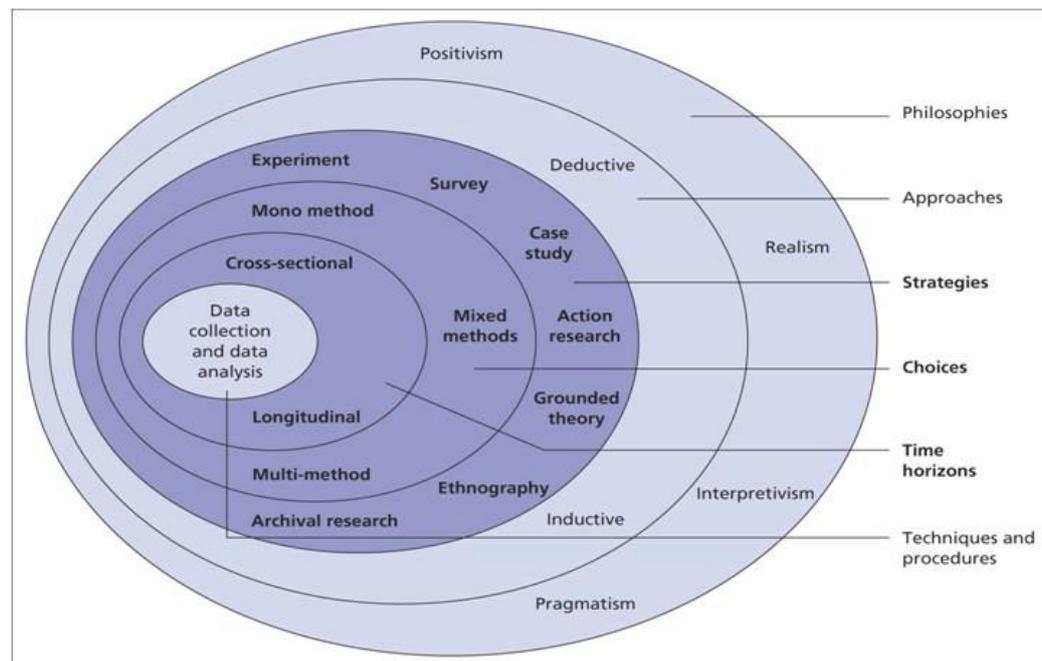


Figure: 4. 1 Research Onion (Saunders *et al.*, 2009)

4.2.1 Positivism

Positivists assume that reality is objective, can be described by measurable properties and is independent of the researcher's instruments (Collis and Hussey, 2013). Positivist studies primarily attempt to test a theory in order to increase the predictive understanding of phenomena. In short, positivist studies are “premised on the existence of a priori fixed relationships within phenomena which are typically investigated with structured instrumentation” (Orlikowski and Baroudi, 1991). Positivists believe that a social phenomenon is measurable, and so is linked with quantitative methods of analysis based on the statistical analysis of quantitative research data (Collis and Hussey, 2013).

Positivism refers to an articulated philosophical tradition following a set of scientific research practices. This is known as methodological positivism, which means to a concept of knowledge, a concept of social reality, and a concept of science. First, it is an epistemology that identifies scientific knowledge with covering laws or theories. Second, it is an ontology that equates existence with objects that are observable and measurable. Third, it is associated with a self-understanding of scientific activity in which social science is independent of the

reality it describes. Since the researcher is not trying to test or evaluate an object, this research is far from following a positivist philosophy.

Positivism assumes the reality is offered objectively and can be characterised by measurable properties that are independent of the researcher and his/ her implements (Myers and Avison, 2002). (Orlikowski and Baroudi 2002), noted that positivist research must be proven quantifiable variables' measures, hypothesis assessing and the drawing of deduction about phenomenon of the sample. The most commonly used positivist research techniques experiment, statistical analysis and survey (Saunders et al., 2009).

4.2.2 Interpretive

Interpretivist is a paradigm that rests on the assumption that social reality is in our minds, subjective and multiple in nature. Thus, social reality is affected by the act of investigating it (Collis and Hussey, 2013). This paradigm entails the belief that a strategy is needed that respects the differences between people and the objects of natural science, and thus requires the social scientist to grasp the subjective meaning of social science (Bell and, Bryman 2007). Interpretive researchers assume that people create and associate their own subjective and intersubjective meanings as they interact with the world around them. The aim of these researchers is to understand phenomena through accessing the meanings that the participants assign to them (Orlikowski and Baroudi, 1991).

To do so, interpretivist researchers use the qualitative method of analysis to understand social phenomena. The interpretive approach is irrelevant to this study, as it emphasises exploring the complexity of social phenomena with the aim of achieving an interpretive understanding, as opposed to the positivist approach, which focuses on measuring social phenomena (Collis and Hussey, 2013).

4.2.3 Realism

According to Kumar, (2015), realism views the world as materialistic in nature and that the qualities of objects only exist outside the mind. The root of critical realism dates to the 1970's and 80's through the work of Bhaskar, since when it has been debated and elaborated by other critical realists, such as (Easton,

2010), (Collier, 1994), and (Archer *et al.*, 2013). According to Fletcher, (2017), critical realism acts as a scientific substitute to both positivism and constructivism but, at the same time, borrows characteristics from the above-mentioned philosophies, and functions as a general methodological research framework without any association with any specific methods.

One of the most important aspects of critical realism is the famous question: what is real and what is the nature of reality? Critical realism claims that the human brain can capture only a small part of a deeper, vaster reality. This is where critical realism differs from positivism, which relies heavily on empirical findings. Bhaskar, (1998) critiqued positivism for promoting '*the epistemic fallacy*' (p. 27) – that is, *the problematic reduction of ontology to epistemology, or the limitation of 'reality'*. In fact, critical realism research rarely views empirical work as the sole evidence for cementing a theory; its advocates see the empirical work as the tip of the three-layered 'iceberg', as shown in Figure 4.2 below.

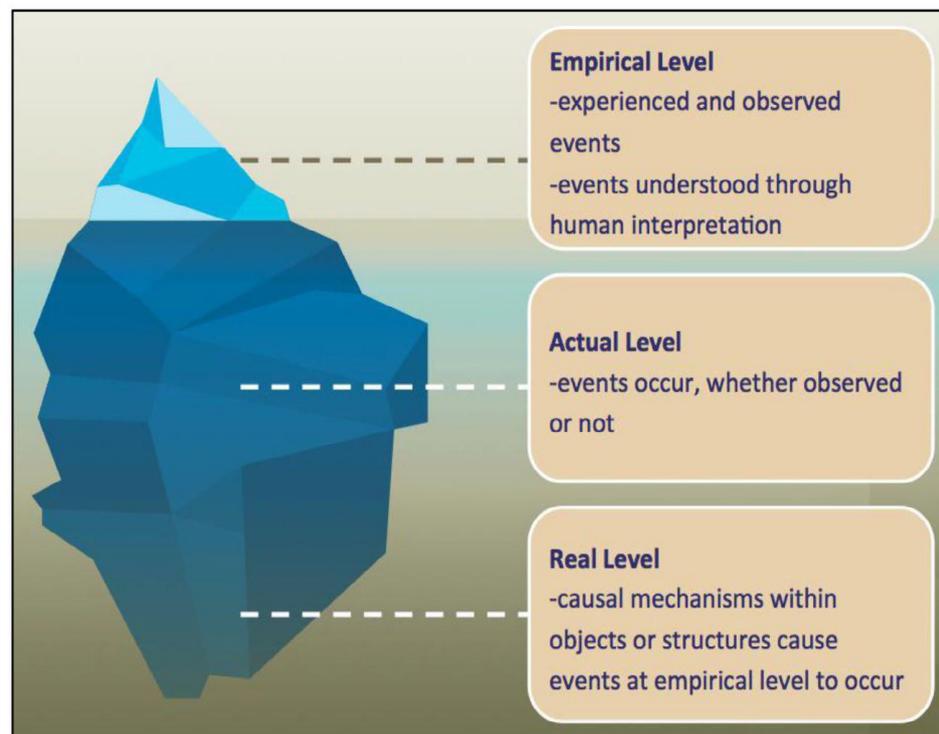


Figure: 4. 2 Critical realism's philosophy metaphor (Fletcher, 2017)

The researcher strongly believes, therefore, that this type of philosophy is unsuited to this research simply because it requires an in-depth investigation and analysis by a specialist in the research field.

4.2.4 Pragmatism

Pragmatism is a well-developed philosophy that comprises logic, philosophy of the mind, and pragmatism. It was investigated by many scholars, such as Charles Peirce (1839-1914), William James (1842-1910), Oliver Holmes (1841-1935), John Dewey (1859-1952), and, more recently, Richard Rorty (1931-2007). All of these happen to be American, which made pragmatism an American philosophy and part of the American way of life, designed to empower people to become economically and culturally independent of the old world (Barnes, 2008).

Pragmatism was originally developed based on the idea of anti-foundationalism, meaning that ideas are always not found to be perfect and useful, but instead are developed cognitively, through experimentation, to satisfy people's needs in a specific environment and at a time (Barnes, 2008). Accordingly, ideas in the pragmatist way of thinking are tools for performing specific tasks. Critiques of pragmatism, such as Modell, (2009), who argues that this approach is *"too ambiguous to provide specific rules to assess validity of a mixed methods approach"*. On the other hand, Baker and Schaltegger, (2015) believe that *"Pragmatism supports the idea that the role of truth is to place people in a better relationship with their environment"*.

Pragmatism rests on two major concepts; truth and sense-making. (James, 1920) states: *"the knower is the actor and the coefficient of the truth"*. The role of truth is to put people in a position of advantage in relation to their environment through empowering them with belief, knowledge, and hope regarding their capability to change and develop a better future. The other concept of pragmatism is sense-making which is, according to Weick, (1995), a fundamental organisational activity during which executives interpret significant events, and their task is to influence organisational decisions and strategic change (Gioia and Thomas, 1996).

A pragmatic philosophy, through its flexibility, opens the door to greater possibilities to assess the truth and make sense of how to tackle research on organisational behaviour and strategic management. This will improve the willingness of researchers to engage with managers on better terms (Burritt and Schaltegger, 2010).

4.2.5 Rationale for Adopting the Pragmatist Philosophy

Most qualitative researches embrace interpretive research, as it focuses on analytically disclosing those meaning-making practices, while showing how those practices configure to generate observable outcomes. Interpretive research does not predefine dependent or independent variables, not set out to test hypotheses, but aims to produce an understanding of the social context of the phenomenon and the process whereby it both influences and is influenced by the social context (Walsham, 1995).

Trauth (2001) lists three factors that influence the choice of qualitative methods in research. The first is the nature of the research problem, the second the researcher's theoretical lens, and the third the degree of uncertainty surrounding the phenomenon. These three main factors are now illustrated by examples in the ensuing sections. An abductive study – such as this research – focuses on the understanding of human attitude toward education that sees participation as a product of interpretation, intervention and individual choices. Interpretive researchers thus attempt to understand phenomena through accessing the meanings which the participants assign them.

The goal of interpretivist research is to understand and interpret the meaning of human behaviour rather than to generalize and predict causes and effects (Tuli, 2010); (Hudson and Ozanne, 1988). For interpretivist researchers, it is important to understand the motives, meanings, reasons and other subjective experiences, which are time- and context-bound (Hudson and Ozanne, 1988); (Tuli, 2010).

Having said this, the assessment of the higher education sector cannot be factual, as it is based on socially-constructed views regarding how beneficiaries shape their goals, attain benefits, and define attributes when selecting an HEI.

The pragmatist stance is relatively 'new' compared to other research philosophies but has become well-established as a viable alternative for researchers. The pragmatist research philosophy stands between the positivist and interpretivist research philosophies, being focused on identifying solutions to issues using theories and frameworks (Sekaran and Bougie, 2016).

4.3 Research Approach

After deciding on which research paradigm to adopt, the researcher needs to make another important decision regarding which research approach to employ (Saunders *et al.*, 2009). There are two main research approaches that are usually used by researchers; namely, the deductive and inductive approaches (Bryman and Bell, 2007); (Collis and Hussy, 2013).

4.3.1 The Deductive Approach

In the deductive research, a researcher starts with the information known about a specific phenomenon to develop his/her research hypotheses that will be subject to empirical examination in the next stage of the research project (Bryman and Bell, 2007); (Saunders *et al.*, 2009). When the positivist paradigm is adopted, a researcher usually relies on the available literature to develop a theory and hypotheses that need to be verified using appropriate statistical analyses (Collis and Hussy, 2013).

Deductive theory is the most common viewed relationship between theory and research. Using this approach, the researcher often deduces hypotheses that usually need empirical justification and within these hypotheses are some concepts and relationships that must be treated as researchable entities (Bryman and Bell, 2015). When using a deductive approach, researchers test the allegations of extant theories or conceptual models regarding the phenomenon under investigation against the collected data. Deductive researchers move from theory to data or from general to specific (Graneheim *et al.*, 2017).

In other words, deductive research moves from the general to the specific (Collis and Hussy, 2013). Six stages are normally followed in the deductive approach: (1) theory, (2) hypothesis, (3) data collection, (4) findings, (5) hypotheses

confirmation or rejection, and (6) revision of the theory. This process is depicted in Figure 4.3 below:

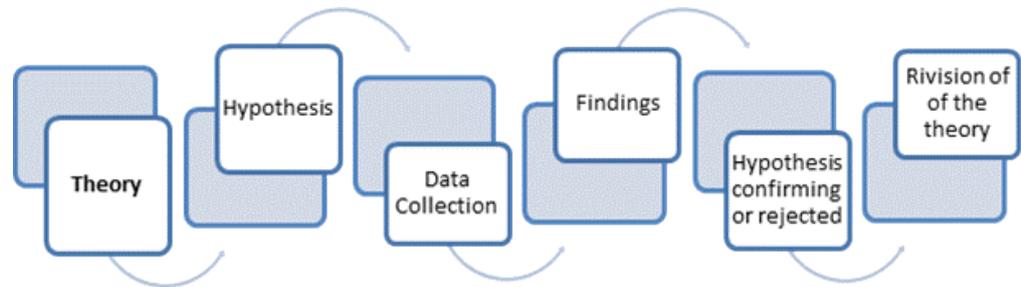


Figure: 4.3 Deductive approach (Bryman and Bell, 2007)

4.3.2 The Inductive Approach

In contrast to the deductive approach explained above, a researcher adopting the inductive approach starts with real observations of a specific phenomenon and then uses his/her findings to generate theory (Bryman and Bell, 2007). Put simply, the inductive approach adopts the following steps: observations-findings-theory, which means moving from the particular to the general (Collis and Hussy, 2013).

Inductive approaches are those followed by researchers to generate theory from data. The most common type of inductive approaches aims to theory building using interpretivist philosophy. Inductive approach is usually related to “qualitative methods”, as they use it to construct a theory from data, rather than testing an existing one. Inductive approach contrasts with the deductive approach in the beginning of the process as. Deductive researchers usually start with hypotheses and test them with data whereas inductive approach is often used to examine concepts such as uniqueness, sense making, and sense giving that relies on interview data to give voice to participants. There are three main characteristics of inductive researches. First, they mostly encompass deep involvement over time in the focal phenomena with regardless to the source of data. Second, inductive approaches rely on hypothetical sampling, which contains the selection of cases based on their ability to light and extend relationships among constructs. Third, inductive approach depends usually on a grounded theory-building process (Eisenhardt *et al.*, 2016).

Researchers using the inductive approach gather information from individuals to identify theme which allow them to develop theories inductively (Ivankova et al., 2007). In an inductive research approach, a researcher begins by collecting data that are relevant to his or her topic of interest. Once a substantial amount of data has been collected, the researcher will then step back in order to gain an overview of the whole body of data. At this stage, the researcher looks for patterns in the data, working to develop a theory that could explain these. Thus, when researchers adopt an inductive approach, they start with a set of observations and then move from those experiences to a more general set of propositions about them.

The primary purpose of the inductive approach is to allow research findings to emerge from the frequent, dominant or significant themes inherent in raw data, without the restraints imposed by structured methodologies

4.3.3 The Rationale for Adopting a Combined Approach

In contrast to most research approaches, this thesis adopts a combination of both the inductive and deductive approaches. The odd term ‘abduction’ was mentioned by Peirce in 1935 and later by (Coffey and Atkinson 1996), (Haig 1995), (Kelle 2007), (Golden-Biddle and Locke, 2007), (Reichertz 2007), and (Strubing 2007). It has many meanings but, in this context, abduction refers to a creative process of developing new hypotheses and theories based on surprising research evidence. Using this approach allows the researcher to move away from the conventional approaches, such as induction and deduction.

According to Peirce, the abduction approach treated scientific work as an ongoing act, during which innovation and reasoning cannot be separated. Even though Peirce adopted abduction in the natural sciences, the logic of abduction can be applied in other practices. According to Tavory and Timmermans, (2014), abductive approach researches gather detailed narratives and data from concerned people in a particular field, then order them according to broad themes and let the data speak for itself. Such researches are so unsure of how to think theoretically about their work. For that reasons, researcher following abductive approach aims to fit ideas into predetermined theoretical account developed by theorists.

The abduction approach rests on an explanatory hypothesis (Peirce, 1934). Despite the early discovery of this approach, it is not yet employed as commonly as the inductive and deductive approaches. To explain the approach, Peirce noted that abduction has a logical form, distinct from induction and deduction. For example, in deductive reasoning, the researcher starts with a theory, and then proceeds throughout the research to test and so conform or refute that selected theory. On the other hand, induction starts with the observation of phenomena and proceeds to theory development. Finally, abduction starts with consequences and then constructs reasons for them. In other words, the abductive approach depends on perceiving that a phenomenon is an effect caused by possibly unseen factors.

The abductive approach is more abstract in nature than the inductive and deductive approaches because it seeks a situational fit between observed facts and theories. Therefore, the abductive approach, according to (Peirce, 1934) is the most appropriate for the explanatory hypothesis. The abduction approach is believed to be the only logical approach that introduces new ideas. According to (Peirce, 1934), induction does nothing but determine a value whereas deduction merely involves the necessary consequences of a pure hypothesis. In Peirce's view, then, abduction is an integral process of the scientific method.

4.4 Research Strategy

It is possible to use different research strategies linked to a philosophical paradigm. For instance, case study research is mostly linked to interpretive research, but can also be utilised in critical and positivist research. The researcher selected the case study approach for this thesis, recommended by (Solberg and Huber, 2006).

It is difficult to describe a case study simply because there is no easy explanation, but in general it refers to an intensive study about a phenomenon or behaviour of a person or organisation in order to generalize about the rest (Jacobsen, 2002). Another definition of case study was suggested by (Thomas, 2011), who stated that it is an analysis of systems that are assessed comprehensively either by one or multiple methods.

A final definition of the case study strategy is that it explores a real-life phenomenon over time, through detailed, in-depth data collection using multiple resources (Creswell, 2013). Subsequent sections will discuss the two main research strategies usually adopted in qualitative research and justify the use of one strategy over the other.

The research question usually dictates that the style of the case study should be exploratory, descriptive or explanatory in nature (Yin, 2015). In the case of exploratory research, (Saunders *et al.*, 2009) claim that it offers an opportunity to search for new ways of approaching topics or ways of approaching new topics. The most common exploratory case study method begins with a general literature review before focusing on a specific phenomenon. Descriptive cases, on the other hand, are usually used as an aid to exploratory studies. Furthermore, explanatory cases are used to develop theories of real-world situations, as argued by (George and Bennett, 2005).

This research adopts the exploratory case study method, where the researcher focuses on how the external environment shapes higher education's goals. Exploratory research presents ways of outlining a research roadmap, which is strongly advised by (Roethlisberger and Lombard, 1977) as a fundamental advantage of case study research. The literature review showed that few studies have covered the influence of the environment on higher education decision-making, which made this area worth exploring.

There are numerous justifications for selecting a case study strategy, as this can help to build theory, qualify an existing theory, describe a phenomenon, and/or test theoretical concepts and relationships (Remenyi *et al.*, 2002). Case studies are usually referred to as the most suitable method where the goals are description or theory-building. (Remenyi *et al.*, 2002) argues that case studies are an appropriate choice in this case, as they offer an inductive interpretation of the findings (Irani, 1998). In the current research, the ability to use a case study to explore a short-coming theory was appealing.

As mentioned above, the case study strategy is also useful for qualifying theoretical propositions. In this case, an abductive approach was adopted, where

the researcher combined the inductive and deductive approaches through qualifying new propositions and testing the emerging data against the extant literature to propose relationships between the identified factors and outcomes. This combined, or abductive, approach was advocated by (Peirce, 1934), who noted that abduction starts with consequences and then constructs reasons for these. This research adopts a case study strategy to describe a phenomenon (policy-making in higher education), qualify the means-end theory, and test new theoretical concepts or relationships.

4.4.1 A Single Case vs multiple case Strategy

Once the researcher decided to adopt a case study strategy, a new challenge arose regarding whether to select single or multiple cases. This question needs to be addressed before any data collection begins. Single case studies can be divided into a critical case (where a significant theory is critically tested), a unique case (which documents the precise nature of a phenomenon that is poorly-understood), a typical case (which refers to capturing the conditions of a commonplace situation), a revelatory case (where a previously non-accessible phenomenon is studied), and, finally, a longitudinal case (that involves observing a phenomenon over a long period of time (Benbasat *et al.*, 1987).

(Yin, 2015) stated that single case studies tend to be more appropriate at the start of theory qualifying and testing, because they offer researchers a chance to settle into the research and begin to understand the environment, jargon and possibilities of their research context. This is like the drift stage of (Benbasat *et al.*, 1987). In addition, single case studies are usually adopted as predecessors to a programme of multiple case studies, so it is not a question of definitively choosing one or the other.

Although conclusions derived from multiple case studies are inherently more reliable than those derived from a single case study (Herriott and Firestone, 1983), it can be difficult to locate suitable multiple cases that support the research field. To counter the above-mentioned shortfall, (Yin, 2015) suggested that the findings from single case can be compared to the relevant extant literature.

4.4.2 Rationale for adopting the Single Case Study Strategy

Moreover, (Yin, 2016) claimed that single case studies can play a role in building and testing theories in emerging disciplines. In his approach, pattern matching is a key tool, where the findings are related to the existing literature using a conceptual model (see Chapter Three). He also argues, along with (Sammaddar and Kadiyala, 2006), that a theoretical understanding can be built by comparing the research findings of one case study to those revealed in early studies. This process of repetition, paying careful attention to factors that are common or different, can establish an efficient process of improving our understanding of the underlying causal factors.

In addition, Gustafsson, 2017 through a qualitative paper based on secondary sources asserted that single case studies are better as they are less expensive, and they could be time savings too. From the above, this thesis will follow a single case study strategy to produce a high-quality theory as this strategy allows a deeper understanding of the issue of the research. Moreover, that single case studies can define the existence of phenomenon in a better sense since it focuses on one source of data. Finally, single case study allows the researcher to look at the issue from different perspective simply because he/ she has more time to analyse the collected data.

Case studies are used to collect descriptive data through the intensive examination of an event in a specific group, organisation or situation. (Siggelkow, 2007) argues that a single case analysis can provide a very powerful example and be used to fill the gaps in existing theories. Case studies are particularly useful for studying complex phenomena, such as failing to select the most suitable higher education institution and programme. However, the argument about the value of single vs multiple cases is slightly intellectual in nature. Advocates of the single case study often adopt a pragmatic philosophy, that this design will produce information that will improve our understanding and reflects the uniqueness of a specific phenomenon. Furthermore, the single case study strategy seeks to generalise its findings depending on other, similar studies. A second advantage of a single case study is its ability to focus on the research field under study (Dyer and Wilkins, 1991). Although this case study

addresses a research issue that is commonly addressed in academic literature, the research's conceptual framework will significantly contribute to the normative literature through presenting a frame of reference for concerned beneficiaries and aiding academics and decision-makers to perform faster and more concisely based on a better understanding of the external environment in which they operate. Overall, this thesis claims to identify the impact of external environmental factors on the higher education sector in Bahrain, leading to the development of a conceptual framework, which dictated that an exploratory approach should be followed.

4.5 Research Method

There are two main research methods: quantitative and qualitative. Some researchers conduct research using one of these methods (the Mono Method) while others tend to use both (Mixed Method), based on the specific research questions and objectives. In the following sections, the two main research methods will be presented, after which the researcher's chosen method will be justified, with supporting evidence.

4.5.1 Qualitative Method

Qualitative research is a way of exploring and understanding the meanings that individuals or groups assign to social or human problems (Cresswell, 2009). Furthermore, qualitative research emphasises words in the collection and analysis of the data (Bryman and Bell, 2007). Qualitative research entails the inductive approach, where the theory is an outcome of a research (Collis and Hussey, 2013). In an inductive approach, the researcher draws generalizable inferences from the observations or findings to build a new theory (Bryman and Bell, 2011). Qualitative research is associated with the interpretive philosophy, where the researcher studies the topic within its context and uses an emerging design, with the categories being identified during the process (Collis and Hussey, 2013). Qualitative researchers can choose from a variety of research strategies, labelled: case study, grounded theory, narrative research, and ethnography (Saunders *et al.*, 2012).

4.5.2 The Quantitative Method

Quantitative research provides a way of testing objective theories by examining the relationships among variables (Cresswell, 2009). Quantitative research emphasises quantification in the collection and analysis of data (Bryman and Bell, 2007). Quantitative research incorporates a deductive approach, whereby the theory guides the research (Collis and Hussey, 2013). In a deductive approach, the researcher starts with the theory, which leads to the research hypotheses. The following phase is the data collection and findings, after which the hypotheses are confirmed or rejected, and the theory is revised (Bryman and Bell, 2007).

The quantitative approach is associated with positivism, which primarily attempts to examine a theory to increase the predictive understanding of phenomena (Saunders *et al.*, 2009). Quantitative studies generally involve experimental and survey research strategies (Collis and Hussey, 2013). Quantitative researchers conduct surveys using questionnaires, structured interviews or structured observation (Saunders *et al.*, 2009).

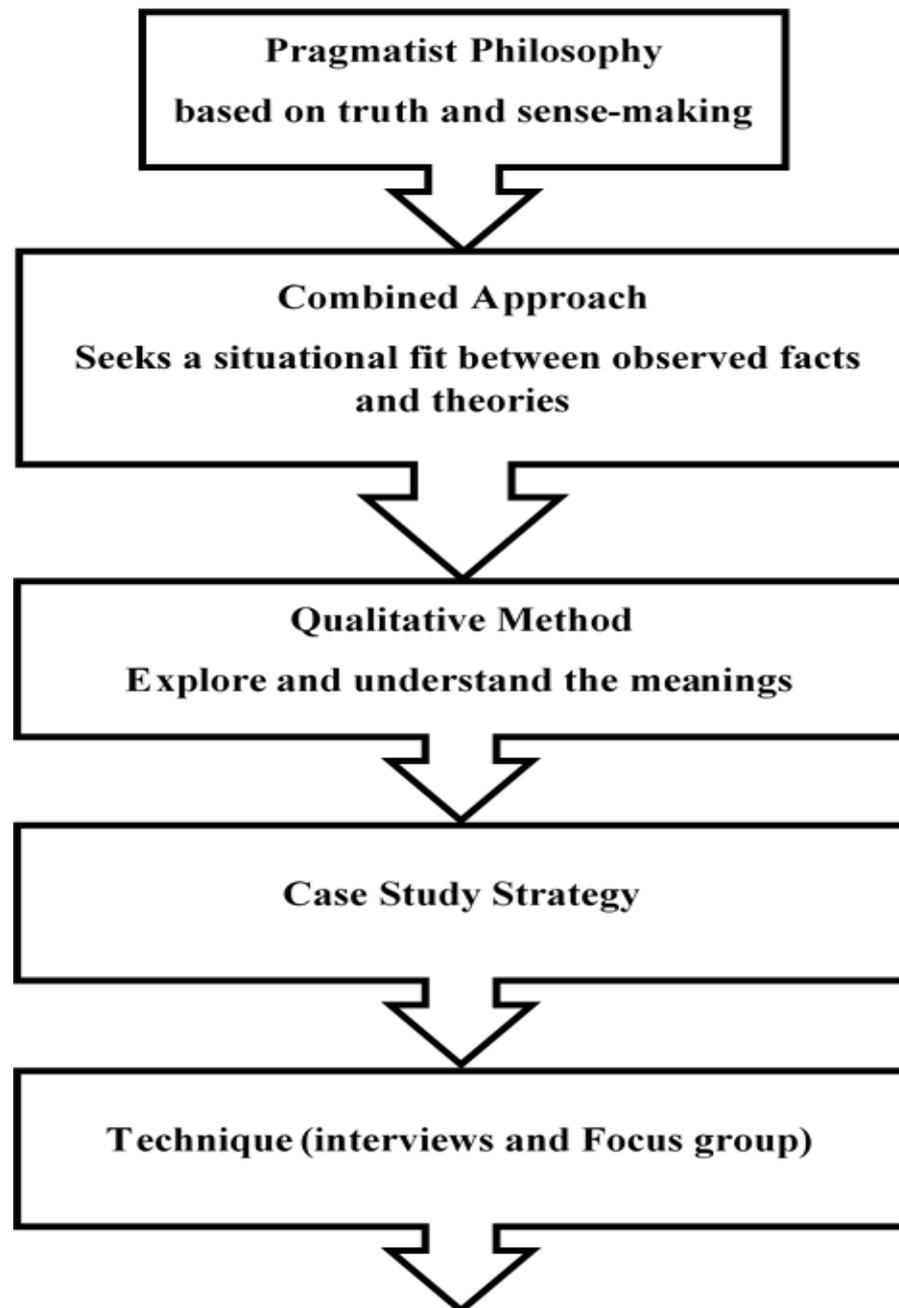


Figure: 4. 4 Research method comparison

As illustrated in Figure 4.4, (Saunders *et al.*, 2009) drew a clear distinction between quantitative and qualitative research in term of four areas: characteristics, the role of theory, research philosophy, and research strategy.

4.5.3 The rationale for adopting the qualitative method

In qualitative research, a literature review is used to provide evidence for the study and identify the underlying problem that will be addressed by the inquiry. The literature review is typically brief and does not usually guide the research

questions to the same extent as do literature reviews in quantitative research. This is done to ensure that the literature does not limit the types of information that the researcher will gather from the participants (Ivankova *et al.*, 2007).

If the researcher wishes to understand the perspectives of the participants, explore the meaning they allocate to phenomena or observe a process in-depth, then the qualitative methodology is an appropriate choice.

Qualitative research enables a deeper examination of what is important to consumers since it relies on the use of the consumer's own voice and language. This kind of research emphasizes the qualities of entities – the processes and meanings that occur naturally. Qualitative research often studies phenomena in the environments in which they naturally occur and uses social actors' meanings to understand them, and also addresses questions about how social experience is created and given meaning (Gephart, 2004).

4.6 Cross sectional Time Horizon

Although cross-sectional and longitudinal studies are both types of observational study, where the participants are observed in their natural environment, there are major differences between both approaches, which can be summarised in Table 4.1 below:

Table: 4. 1 Cross-sectional vs longitudinal research comparison

Longitudinal study	Cross-sectional study
May extend over years or decades.	It is faster to conduct than longitudinal studies.
The researcher needs to revisit the participants at given time intervals.	It is conducted at a given point in time.
It is conducted with the same participants over the length of the research.	It is carried out with different samples.
It can result in a cause-and-effect relationship.	It doesn't usually show a cause-and-effect relationship.
Only one variable is measured when conducting the research.	More than one variable can be observed during the study.
Longitudinal study is extremely expensive.	It is comparatively cheaper than longitudinal study.

Cross-sectional timing was the choice for the research data collection which will be conducted over a period of 8-10 weeks. A cross-sectional approach for the

time horizon means that the focus of the research is on the current situation, whereas the alternative, a longitudinal approach, requires the use of repeated studies over a given period to identify the correlations between observations and changes among the results over different time periods.

4.7 Research design

Research design is defined as the general plan of how a researcher will answer the chosen research question (Saunders *et al.*, 2009). (Collis and Hussey, 2013) defined research design as “science (and art) of planning procedures for conducting studies so as to get most valid findings”. Detailed plans are used by researchers to guide and focus their study. These plans include a clear objective derived from the research questions, and specify the sources of the data collection, data analysis, and ethical issues (Saunders *et al.*, 2009). The plan of this study involves three stages: research design, data collection and data analysis. In the research design phase, the researcher conducted a detailed literature review on organisational conflict and ESM environments, which revealed a lack of knowledge about the impact of digital fluency in the context of conflict management on which to base the current research.

Thereafter, a conceptual model was developed, whereby four research propositions were proposed. The research strategy chosen for this study was case studies (pilot and main), as will be justified in the following sections. The second stage was the data collection phase, which involved a pilot study to check the reliability and validity of the questionnaire. Then, the researcher amended the interview questions accordingly and presented the final set of questions. Thereafter, the main data collection was carried out by holding the interviews. The third and final phase of this research was to analyse and discuss the results of the collected data assisted partially by NVIVO software used to categorise the themes, whereas most data was analysed manually. This plan enabled the researcher to achieve the aim and objectives set out in Chapter One. An overview of the research plan is provided in Figure 4.5 below:

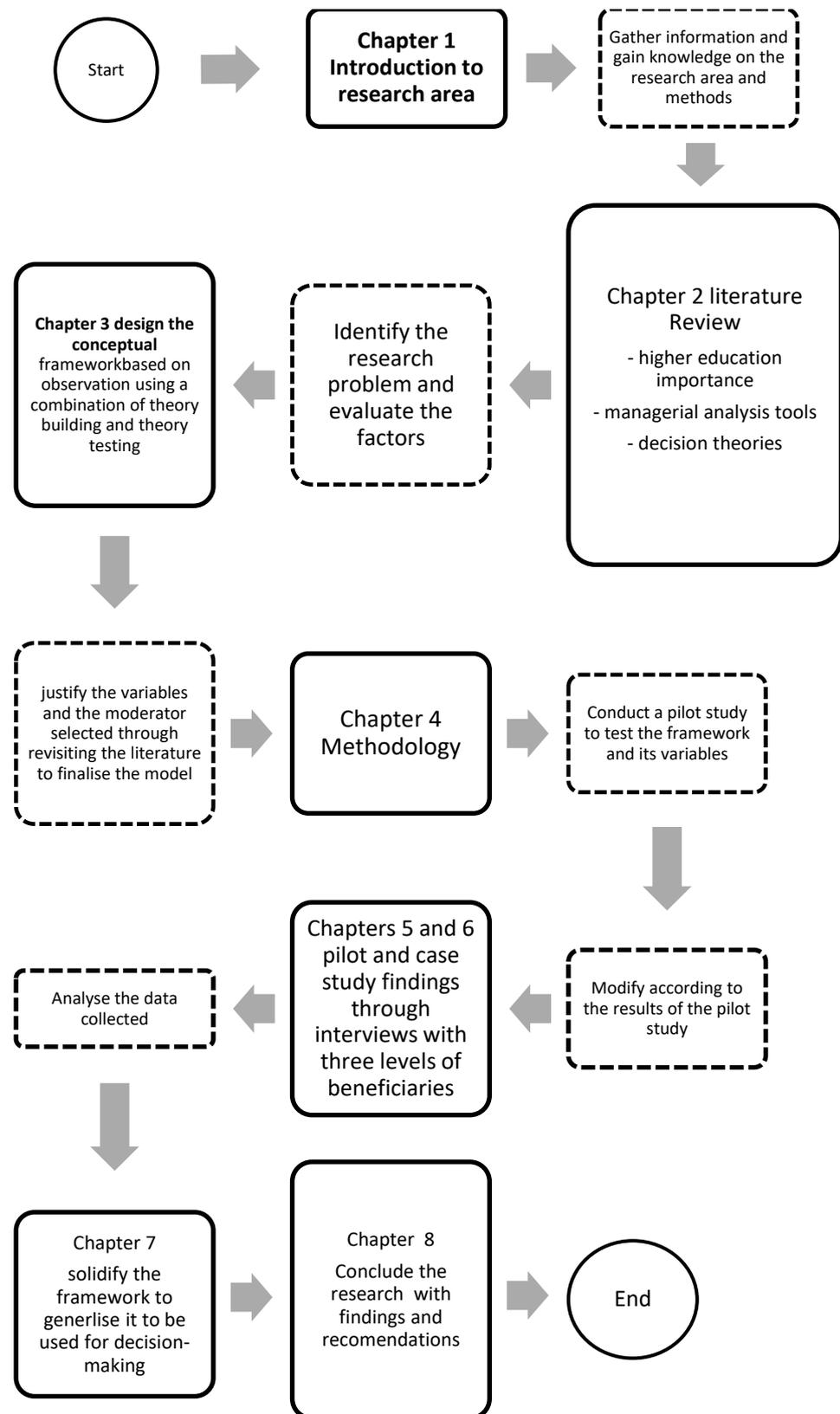


Figure: 4. 5 Research Design (Author)

4.8 Empirical Research Methodology

After presenting the theoretical methodology and justification for adopting a pragmatist qualitative single case study research, the researcher intends to implement these theoretical ideas in the empirical research methodology adopted for this study. This includes the data collection, data analysis, case study protocol, and case study questions development.

The choice of higher education beneficiaries was decided based on three main factors. First, the primary beneficiaries (student, parents, and higher education institutions administrators) were sorted and identified by respective HEIs administrator to participate and share their views and perspectives and see whether the beneficiaries are aware of the defined higher education goal set by the National Higher Education Strategy (2014-2024). The second factor was the clear relationship between participants as students and parents represent the primary beneficiaries from higher education whereas the second group is more related to higher education goal shaping (HEIs administrators). The third and final factor for choosing the participants was that the three types of beneficiaries can be easily related through the research focal theory (Means-end Theory).

4.8.1 Data Collection

The data collection method is pretty straight forward. The researcher selected the primary beneficiaries of higher education (students both current and previous, parents, and higher education institutions administrators). The next step was to categorise them into individuals in the case of students and parents and in focus group for HEIs administrators to maximise the benefits of data collection and discuss in depth their perspective on the topic.

Empirical data were primarily collected through conducting in-depth semi-structured interviews with participants drawn from concerned beneficiaries in the public higher education sector in Bahrain. In doing so, their views were gathered on the knowledge about the higher education sector structure, the importance of higher education, the factors influencing higher education's goals, and how higher education enrolment decisions are made. The reliability of the research methods was established through a pilot case study, conducted

with participants from a smaller public HEI in Bahrain through meetings with students, parents and a focus group of HEI to develop the questions for the main study. The results of the pilot study are presented in chapter 5 due to their significance and are included in the conclusion and discussion aspects of this research.

Due to the adoption of Means-end theory in this research as a focal theory, the laddering interview technique was chosen to collect data. This technique is useful because it offers an easy systematic approach to establishing an individual's core set of constructs that explain how the world is viewed. Laddering interviews are used widely in the field of psychology, and their success has led researchers in other fields to adopt their core views in their research. The laddering technique was first introduced by clinical psychologists in the 1960's as a mean of understanding people's primary goals and beliefs (Hawlev, 2009).

Numerous researchers, such as (Costa *et al.*, 2004), (Reynolds and Whitlark, 1995), and (Reynolds and Gutman, 1988), have asserted that the laddering technique was developed by Dennis Hinkle in 1965 in a PhD dissertation, as a way of exhibiting people's belief structures; and that the term "laddering" was devised by (Bannister and Mair, 1968), who extensively used the technique in their own research. Laddering refers to an in-depth, one-on-one interviewing technique used to develop an understanding of how consumers translate the attributes of any service into meaningful associations with respect to the self, following Means-end theory (Gutman, 1982); (Reynolds and Gutman, 1988).

In a joint effort, Reynolds and Whitlark, (1995) defined the technique used to prompt the means-end connections and attribute-benefits-goal networks used when making decisions about life's activities. It is qualitative in nature – utilising a semi-structured interviewing tool intended to produce responses based on the participants' insights into the Attribute-benefits-goal elements (Jusan, 2007). Reynolds and Gutman, (1988), meanwhile, argued that laddering involves a tailor-made interviewing format, based mainly on a series of directed propositions, asking, 'Why is something important to you?', with the direct aim of identifying the relationships between the key perceptual elements across the

range of attributes, benefits, and goals. Costa *et al.*, (2004) defined the technique as including face-to-face, individual, in-depth, and semi-structured interviews, aiming to identify the attributes, benefits, goals, and relationships of concerned beneficiaries regarding the research topic (Costa *et al.*, 2004).

The data collection for both the pilot study and the main case study involved two methods. The laddering technique described above was followed by conducting in-depth, semi-structured interviews with current public higher education students and recent graduates, and with the parents of the previously mentioned students. Moreover, another data collection technique was adopted to ensure data triangulation as the researcher opted to collect data through a focus group.

A focus group is a type of group interview that utilises the communication among the participants to generate data and, in turn, useful information. Instead of the researcher posing the same question to various individuals on a one-to-one basis, by putting a question to the group, each participant can answer from his/her perspective to enrich the discussion and encourage others to talk. The idea of focus groups was initially used to assess the effect of TV commercials on people's behaviour (Basch, 1987). The main reason for employing the focus group technique is to ease participant anxiety and provoke their intellectual capabilities to generate information on a specific topic.

This technique proved successful with the higher education administrators in both the pilot and main case study. The higher education administrators' expertise in various fields allowed the integration and comprehensiveness of the data collected.

Finally, the interview protocol underwent the standard Brunel University process to obtain ethical approval for the data collection methods and the mode of collection. The researcher took care to ensure that the data collection process was not contaminated by data bias. As part of the research design, an approach previously used by Molla *et al.*, (2006) was used for the data collection, analysis and checking during the initial, exploratory research.

4.8.2 Data Analysis

According to Welsh, (2002), qualitative data analysis has many shapes and forms. Welsh mentioned that there are three approaches; literal, interpretive, and reflexive. Literal approach focuses on the exact use of specific language or grammatical structure. Interpretive approach tries to make sense of research participants' view and perspectives and for that, the researcher tries to interpret what they mean. Finally, the reflexive approach tries to focus attention on the researcher's contribution to the data. Whichever of these three probable approaches is followed by researchers they face a choice of using either manual and/or software assisted means in their data analysis.

Data analysis of the findings shaped the final phase of the research methodology. The data derived from both the pilot and case studies were triangulated by source and technique and then analysed to draw empirical conclusions. This study adopted a qualitative data analysis technique and used NVivo software (a qualitative analytical tool) to support the development of the manual coding system used for the data analysis. NVivo software was employed for the storage and retrieval of the interview transcripts during the multi-stage coding process. Theoretically, the process of the data analysis involved examining the meaning of people's words and actions in the case of interviews. Realistically, the data analysis was more focused on making sense of the empirical findings in relation to the research propositions, and common themes were identified and formed into a coherent analysis (Corbin and Strauss, 2008). The general process of data analysis for interviews is graphically illustrated in figure 4.6 below:

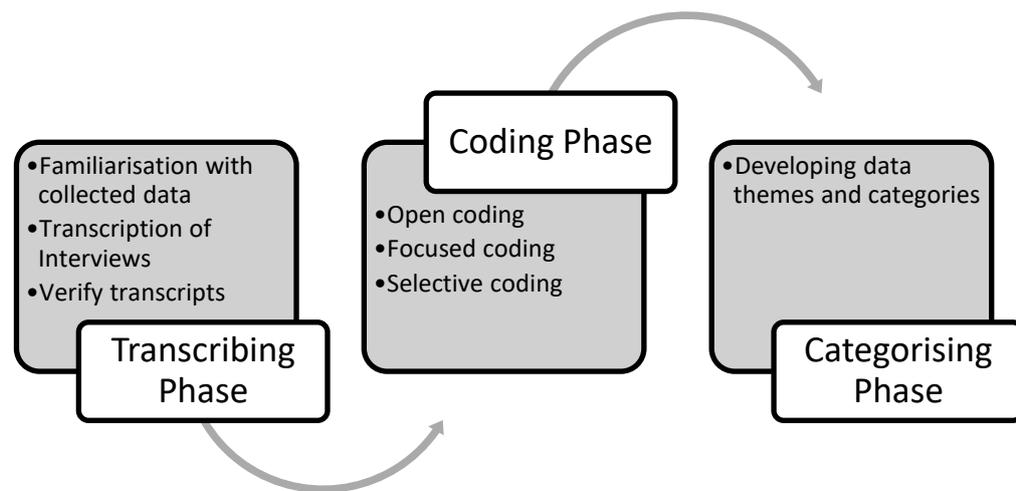


Figure: 4. 6 Data Analysis Process (Author)

4.8.3 Case Study Protocol

Researcher like Eisenhardt, (1989) and Yin, (2015) emphasise the need for a case study protocol to guide case study research. Case study protocol is merely a set of guidelines that can be utilised to frame a case research study (Miles and Huberman, 1994); (Pervan and Maimbo, 2005); (Yin, 2015). Accordingly, a protocol aims to set out the general procedures controlling the conduct of both the researcher and the research (Yin, 2015). Moreover, a case study protocol helps to identify the research instrument(s) to be used to collect the data during the research project. Remenyi *et al.*, (2002), Runeson and Host, (2009), and Yin, (2009) stressed the importance of using a protocol to increase the reliability of case study research and guide the researcher throughout the data collection process.

Moreover, the case study protocol permits researchers to collect data efficiently and improve their ability to communicate with their participants (Miles and Huberman, 1994); (Yin, 2015). Consequently, (Yin, 2015) noted that a protocol can contain a preview of the project, research procedures, research questions, and the research outcome plan. A case study protocol helps to keep researchers focused on the research topic and allows them to foresee any possible challenges and risks that may arise during the case study (Yin, 2015).

4.8.4 Case Study Questions

Case studies involve a set of questions that aim to reflect the main research questions and propositions of the conceptual framework. There are some differences between the questions put to the participants and the questions shown below in table 4.2. The four questions are for the researcher to reflect on and they serve as a guide for conducting the data collection and answering the research questions. The primary drive of these questions is to maintain the researcher's focus during the data collection process. (Yin, 2015) noted that it is also important to make a note of the likely sources of evidence for each question. The researcher advocates that posing these questions will enhance the data collection process and help him to gain the maximum benefits from the interviews, as they tend to drift from the path of the research. Consequently, four specific questions were developed to help to retain the research focus during the data collection process. These questions are presented in the following table:

Table 4. 2: Case study questions table (Author)

Case study questions	Research questions	Research propositions
1. How important is higher education for you and for Bahrain?	Why is higher education important to Bahrain?	Higher education's goals shape the attributes of HEIs.
2. How significant is the effect of external environmental factors on shaping higher education in Bahrain? a. Demography b. Infrastructure c. Culture d. Economy e. Regulation	How do external environmental factors define Bahrain's higher education goal?	The external environment determines the goals of higher education.
3. What are the benefits of higher education in Bahrain?	How does Bahrain's higher education goal align with higher education primary beneficiaries?	The attributes of the HEIs contribute to higher education's benefits.
4. What are the main reasons for enrolling in HEIs in Bahrain?		Higher education benefits serve predefined higher education goals.

4.9 Chapter Summary

Chapter Four developed and illustrated the adopted research methodology. The backbone of this methodology is the pragmatist philosophy that has significantly influenced the subsequent research methodology procedure such as how the data were collected, analysed, and presented. Since this research focuses on a real-world phenomenon of the higher education decision-making process within the context of Bahrain, the case study strategy was a useful research strategy. The chosen strategy allowed the researcher to develop the conceptual framework in its natural setting. This research is considered exploratory in nature, as it aims to qualify an existing theory through adding the external environment factor to the Means-end theory of decision-making.

The case study approach offered a range of options to follow. The researcher selected a single case study as the strategy for this research due to the limited number of public HEIs in Bahrain, the context of the research. In addition, the

holistic conceptual framework that was developed facilitated the analysis of the empirical findings. Within the single case study strategy, the researcher adopted an unorthodox means of data collection, as he employed both semi-structured interviews and the focus group technique to enable data source and technique triangulation. Chapter Five presents the results of these two enquiry methods.

This chapter has established the research methodology to refine the higher education decision-making framework developed in this study. This methodology can be summarised as the pragmatist philosophy depending on a single in-depth case study of a public HEI in Bahrain. The data collection techniques allowed the researcher to conduct a holistic observation of various beneficiaries. Finally, the findings were assessed considering the framework developed from the literature review and used to refine that framework.

CHAPTER FIVE-PILOT STUDY FINDINGS AND ANALYSIS

5.1 Introduction

In the previous chapter, the researcher justified and investigated the research methodology used in this thesis. This chapter applies the research methodology to use the proposed conceptual framework for assessing the influence of external environment factors on higher education sector through means-end theory of decision making. In doing so, the researcher presents and analyses the empirical data collected from two public HEIs in Bahrain.

The researcher covers two case organisations (one pilot and one main), as this was considered to provide enough information to justify the research presented in this thesis. Because the number of HEIs in Bahrain is very limited, the researcher concluded that it was better to survey only two organisations, especially since one of them fosters the highest number of higher education students in Bahrain. The objective was to present the preliminary research findings obtained while observing phenomena in the organisational settings.

Pilot study in this thesis was used primarily for four reasons. First as pre-testing of a research interview questions as a research instrument (Baker, 1994). Second, and according to Van Teijlingen and Hundley, (2001), the pilot study tries to identify potential practical problems in following the research procedure. Third, the pilot study uncovered local politics or problems that affected the research process. Finally, the pilot study gave an advance warning about where the main research project could fail.

The data collected were utilised to test: (a) the understanding of higher education's importance; (b) the effect of external environmental factors on higher education's goal; (c) the influence of goal on the attributes of HEI; (d) the relationship between attributes and benefits of higher education; and, finally, (e) higher education's benefits. Nonetheless, the analysis of the empirical data should not take the form of a comparison among cases. Instead, the researcher offers an empirical analysis of different case study perspectives that describe

individual and organisational behaviour and perceptions when evaluating the higher education sector's benefits in the context of Means-End Theory.

Consequently, rather than generalising the results of these cases, the researcher proposes to examine each case by describing the respective approaches to defining the benefits of higher education and, by doing so, to allow others to draw parallels within the outcome. This chapter commences by providing a background to the establishment of the higher education sector in Bahrain and its development.

5.2 Case one (pilot) HEI-X

The following findings were based on one-to-one interviews with two higher education students from HEI-X, two parents of current students, and two graduate students, in addition to a focus group with three HEI-X administrators. Some of the interviews were conducted in English and some in Arabic, due to the level of the interviewees' English language, to ensure that the full spectrum of questions was covered.

HEI-X was established by His Majesty King Hamad bin Isa Al Khalifa by Royal Decree No. 65 for the year 2008. It is governed by a Board of Trustees by Royal Decree No.23 for the year 2012, that is includes renowned industry and community leaders. The Royal Decree establishes HEI-X as a Governmental Higher Education Institution and gives the Board of Trustees the right to approve and grant certificates and qualifications in the disciplines taught at this institution, including the first Bahrain Bachelor students who met the graduation requirements in July 2013.

HEI-X was established by the government of Bahrain to fulfil the need for a skilled labour force, with the aim of supporting economic growth and diversification in the country. HEI-X delivers applied, professional and technical qualifications. Graduates will be work-ready; confident and competent, aware of what is expected of them in the professional world, and able to perform to their full potential.

The participants in the pilot case study were divided into three main categories: current students or graduates of HEI-X, the parents of current students or recent graduates, and a focus group of HEI-X administrators. The selection of the participants was based on the role of each in the higher education process, with the higher education administrators representing the strategic level, parents the tactical level, and students the operational level. Table 5.1 below presents the details about the pilot study participants.

Table: 5. 1 Pilot case study participants

Participant number	Category	Brief description
P 01	Current higher education student	20-year-old male, studying information technology.
P 02	Higher education graduate	23-year-old female graduate with a degree in logistics
P03	Parent of a current higher education student	48-year-old male with an MBA degree
P 04	Parent of a higher education graduate	61-year-old with a bachelor's degree
FG 01	Higher education institution administrators	Three administrators from admission and registration, student affairs, and public relations at HEI-X

5.3 Findings and Analysis

As mentioned above, the data for this study were collected in two different ways to ensure their authenticity and as a type of data triangulation. The first type of data collection method was semi-structured, one-to-one interviews with two students; one a current student and the other a recent graduate. In addition, the parents of the above-mentioned student were interviewed separately. The second type of data collection method was the focus group, in which three HEI-X administrators were asked the same questions and each responded according to his field and speciality.

5.3.1 Higher Education's Importance, Structure, and Evaluation

In this part of the interview, the researcher aimed to understand three main aspects of higher education in Bahrain. The first was the level of awareness of the different beneficiaries when determining the importance of the higher

education sector for individuals and society. The second aspect was to explore the level of awareness amongst the beneficiaries regarding how higher education in Bahrain is structured and shaped. Finally, the researcher explored the understanding of concerned beneficiaries regarding the process followed to evaluate HEIs in Bahrain.

Among the interview responses received, a prominent idea was mentioned by one of the parents (P01):

"Higher education in the region has become a way of delaying students from entering the labour market, which delays the problem of unemployment and qualifies them for later, unavailable jobs. In addition, I believe that higher education has become a natural progression from high school, in the absence of other incubators, like factories and industry".

This alarming idea suggests that higher education could be a problem rather than a solution, and act as a hurdle to economic growth instead of being a catalyst.

5.3.1.1 Higher Education's Importance

All higher education primary beneficiaries are fully aware of the importance of higher education as a means of gaining knowledge and providing the labour market with a skilled, knowledgeable workforce that can develop the economy based on the state's vision (Bahrain 2030). On the other hand, the biggest difference between the beneficiaries lies in their depth of understanding. For example, the students saw the importance in a more individualistic way, while some of the parents looked at it from a political point of view, as a means of managing the problem of unemployment. To explain this point, (P02) stated:

"Higher education is important for the country's development through generating minds with skills and knowledge to realise this development".

To cement this idea, (P03) noted that

"With respect to Bahrain vision 2030, higher education will play an important role in changing the economy from oil based-one to a more diverse economy".

On the other hand, (P05), who is a curriculum planner at HEI-X, had a more precise idea of the importance of higher education. He stated:

"Higher education is important to the country and to individuals. When a student enrolls on a programme to satisfy his/her desire and get a degree, this should be part of caring for the citizens' freedom of choice. When the country subsidizes higher education, I understand the country's eagerness to recoup that subsidy in the form of a work force".

From the above, the author concluded that, although all the beneficiaries agreed on the importance of higher education, they had different perspectives regarding its importance to individuals and society. For some, higher education is more individualised but, for others, it is more society-based, and so should contribute toward the development of the economy of the country. The latter claim that, once the country is strong economically it will be reflected automatically on individuals.

5.3.1.2 Higher Education's Structure

Although the beneficiaries possessed a clear overall understanding of higher education's structure, there exists a gap when it comes to the role of the various entities responsible for governing higher education. There is no clear pattern regarding whether the parents or students understood more about higher education. Of course, HEI administrators are fully aware of the structure due to their experience and jobs. Some believe that higher education must have a supreme independent authority responsible for planning and executing higher education development to ease the pressure on the Ministry of Education.

Overall, there is a clear understanding of the structure of higher education in Bahrain, as all beneficiaries are knowledgeable about the governing body of higher education. Naturally, the HEI administrators, on the other hand, have a more detailed picture of how higher education is structured than the students and parents. Participant (P03) commented:

"I think that higher education falls under the umbrella of the Ministry of Education, but I don't know exactly under which branch". A member of the higher education administrator focus group (FG01) added that:

"The higher education in Bahrain is governed by the Ministry of Education through the Higher Education Council and all are under the Supreme Council for Development of Training and Education. Due to my experience in admissions and registration, I am very aware of the structure of higher education in Bahrain. The Ministry of Education is the general umbrella and the Higher Education Council was formed in 2005 to oversee all issues regarding higher education".

In this regard, the parents of the higher education students were less aware of the structure of higher education in Bahrain. Participant (P04) stated:

"In my understanding, higher education in Bahrain falls under the umbrella of the Ministry of Education, the Higher Education Council and the Bahrain Quality Assurance Authority".

This clearly illustrates that a gap exists between the beneficiaries in describing the structure of higher education in Bahrain, which may be due to a lack of communication and awareness among the parents and higher education students.

5.3.1.3 Higher Education's Evaluation

Most of the beneficiaries have a reasonable awareness of the evaluation process of HEIs in Bahrain but regard it as not totally transparent and efficient due to its novelty and the incapability to present to the beneficiaries a clear picture of the performance of HEIs to assist their decision-making. The evaluation process should take into consideration the goal, benefits, and attributes of higher education. The extant regulations of the higher education sector, especially the private part of this, should cover more than issuing licensing permits.

Both students and parents agree that some type of evaluation occurs, but do not seem to possess a clear understanding of what this entails. Both groups agree that this evaluation is inefficient because it did not help them to choose the most appropriate HEI. Although administrators have a better understanding of how HEIs operate, they stated that the process needs to be revisited and assessed to provide more robust, clearer results. Participant (P02) had a very limited idea about the evaluation process of HEIs, and commented:

"The only thing I know is that the public HEIs are better or have a better reputation than private HEIs in Bahrain, but I have no idea

about the evaluation process. I believe that the evaluation of HEIs in Bahrain is efficient, although I am not fully aware of the process”.

On the other hand, (P04) had an adequate idea of the process, and said:

“According to my knowledge, the HEIs are evaluated by the Ministry of Education and Higher Education Council, but I don’t think that the evaluation is very efficient because I wasn’t able to differentiate between different HEIs’ quality of teaching before selecting my current HEI”.

The members of the focus group had a better understanding of the current evaluation process, but still believed that it had room for improvement.

Participant (FG03) stated:

“Accreditation is one method used by HEC to license their operations and Bahrain Quality assurance evaluates their programmes and institutions’ performance. Also, HEIs benchmark themselves against other leading institutions in many aspects, such as the quality of teaching and learning. We must be fair; the evaluation process is relatively new to be criticised. It’s more building capacity for evaluation rather than applying it. It is a healthy process, but inefficient. There is some confusion between the roles of HEC and BQA, so some rubric needs to be applied to some of the existing indicators to avoid different explanations by HEIs”.

Generally, there is a clear understanding of the importance of higher education to the individual and society, but there is also a lack of directed effort to exploit this importance to the full. There is a strong belief that higher education is the natural progression from high school. The beneficiaries are aware of the importance of higher education and, interestingly, most link it to the achievement of Bahrain’s Vision 2030 and the overall development of the country. It should be noted, however, that some regard higher education in Bahrain merely as a temporary solution to delaying unemployment for the individual.

5.3.2 The Effect of the External Environment on Higher Education’s Goal

The effect of external environmental factors on higher education’s goal is a core characteristic of this thesis. The external factors were derived from an existing business model known as a PESTLE analysis, that was used to evaluate the

external environment of the organization. The researcher modified this tool to suit the research and the environment of higher education in Bahrain. There were two main objectives for this part of the interview; the first is to examine whether the beneficiaries are aware of the effect of such factors on shaping the goal of higher education; and the second is to introduce this idea as a frame of guidance for concerned beneficiaries when shaping the goal of higher education, regardless of whether these are individual or governmental goal.

The external factors affecting higher education were divided into five main factors and sub-factors. The demographic factor was divided into five sub-factors as follows: population size, gender ratio, average age of population, socio-economic status, and ethnicity. Through this factor, the researcher aims to test the significance of each sub-factor in shaping the goal of higher education. The second main external factor is infrastructure, which was divided into four sub-factors: communication network, digital literacy, road network status, and basic education status. The researcher aims to determine the significance of the preceding sub-factors in shaping the goal of higher education in Bahrain.

The third external factor affecting the goal of higher education in Bahrain is culture. This was divided into four sub-factors: social values, attitude toward higher education, beliefs, and norms, to test their significance in shaping the goal of higher education in Bahrain. The fourth external factor is the most important one, which is economics. This was divided into four sub-factors: average income, GDP, unemployment rate, and nature of the economy. The economic sub-factors empirically proved to be of great significance in shaping the goal of higher education, both individually and collectively. They play an important role in the decision-making process of concerned beneficiaries. The fifth and final factor is the regulatory factor, which was divided into three sub-factors: higher Education Council regulations, BQA HEI indicators, and individual HEI regulations.

5.3.2.1 Demographic Factor

All higher education primary beneficiaries agree that the demographic factor is important in shaping the goal of higher education. Most of the beneficiaries believe that there is little significance regarding gender ratio and ethnicity, as Bahrain is an open society that accepts and respects everyone. On the other hand, some pessimistic interviewees, and especially the parents, see population size as a threat to higher education if it is not dealt with and fear that even ethnicity could become a problem in future due to political issues. Participant (P04) stated:

“To start with, I have no idea of the higher education goal in Bahrain, but I believe that the gender ratio and ethnicity are more important than population size and socio-economic status, whereas the average age of the population has no importance in shaping higher education goal”.

Participant (P01) shared the same view on the importance of the demographic factor and stated:

“Population size is one of the most important factors in shaping the goal of higher education. On the other hand, gender ratio and ethnicity are not important in shaping this goal as Bahrain has no problem in accepting people with different ethnicities”.

Meanwhile, the HEI administrators have a different opinion when it comes to the role of the demographic sub-factors in shaping the goal of higher education. As (FG02) noted:

“The gender ratio and ethnicity are not an issue in Bahrain. In fact, without looking at it, we find the numbers very close to each other and it is almost 50-50. We take into consideration the natural increase in the population of the country, but we can only accommodate a portion of that number due to the limited resources. We take the maximum we can take without jeopardizing the quality. We don't look at the numbers of high school graduates. It was noticed from experience that more females apply for higher education institutions than males”.

The researcher was surprised by the level of awareness among the higher education students concerning the role of demography in shaping the goal of higher education. (P03) stated:

“Although I don’t know the defined goal of higher education, I think that gender ratio and social economic status are less important than population size and ethnicity when shaping the goal of higher education in respect to the demographic aspect”.

(P01) expressed her thoughts on the role of demography in shaping the goal of higher education as follows:

“The pressures of demography on the higher education system have been clear. I think that social economic status plays the most important role in shaping the goal of higher education”.

All the primary beneficiaries agree that the demographic factor is important in shaping the goal of higher education. Most of the beneficiaries believe that there are no issues regarding the gender ratio and ethnicity, as Bahrain is an open country that accepts everyone regardless of his/her gender or ethnicity. Among the different levels and types of higher education primary beneficiaries (parents, students, and to some extent HEI administrators) specified in the research, there is a common agreement that the state’s higher education goal are not delivered to them clearly nor shaped according to the five external factors of the environment.

5.3.2.2 Infrastructure Factor

As mentioned above, this external factor was divided into four sub-factors. Below are some of the most important findings regarding the role of this factor in shaping the goal of higher education in Bahrain. Most of the beneficiaries believe that basic education is the most important infrastructure in shaping the goal of higher education. On the contrary, there exist conflicting views regarding the infrastructure factor among different beneficiaries and how it affects higher education’s goal. For example, the students are more worried about road networks and communication and less concerned about digital literacy, whereas the parents think that digital literacy and basic education are more important than other considerations.

Participant (P03), who is a higher education student, stated in this regard:

“I believe that communication networks and road networks are more important than basic education and I would like to give an example of

this. I graduated from the Islamic religion Institute but decided to study ICT because I was interested in the subject”.

Participant (P02), who had graduated from HEI-X, stated: *“I believe that basic education status, digital literacy, and communication network are the most important factors in shaping the goal of higher education in Bahrain”.* Both students believe that, although the infrastructure plays an important role in shaping the higher education sector, it is not very influential in a small country like Bahrain.

Regarding the same factors, the parents emphasized the role of basic education status in shaping the goal of higher education in Bahrain. (P04) noted that:

“I believe that Bahrain, being a small state, makes the infrastructure factor less important, but I believe that basic education status is more important than road networks, digital literacy, and transportation-communication networks”.

Participant (P01) agreed with the previous parent in regarding basic education as the most effective infrastructure sub-factor that shapes higher education, and added:

"I think that basic education status is the most important factor in shaping the goal and unfortunately this is not happening in Bahrain which has consequently turned Bahrain HEIs into other high schools with grown-up students".

Basically, this participant emphasised that basic education is not preparing high school students in the right way to enrol at HEIs.

The HEI administrator focus group members agreed on this subject and highlighted the importance of basic education status in shaping the goal of higher education. Participant (FG02) noted:

“Bahrain is a small country, so the road system and communication networks play a less important role in shaping higher education’s goal. On the other hand, basic education status plays an important role as we suffer some weakness in inputs. Some programmes require proficiency in digital literacy, but the university provides an orientation course to help newcomers catch up with that. There is a big gap between our standards and the input into life skills”.

The infrastructure factor plays an important role in shaping the goal of higher education and basic education status must be taken into consideration and developed in a way that is aligned with any defined higher education goal. Other considerations are important in facilitating the achievement of the stated goal.

5.3.2.3 Cultural Factor

Although Bahrain is considered a conservative country due to its geographical location, it is in fact an open, civilized country, since education was introduced there earlier than in most of its neighbouring countries. All the interviewees agreed that Bahrain is an open society, with a positive attitude toward higher education. There are some minor differences regarding the degree of importance of the cultural factor, but most of the concerned beneficiaries regard that this as a catalyst in shaping the goal of higher education, rather than a hindrance.

The higher education students think that the cultural factor is not an obstacle to decision-makers when shaping the goal of higher education. Participant (P02) stated:

"I believe there is an increasing awareness of higher education among parents. On the other hand, the effect of beliefs and norms is decreasing with the increasing importance of higher education".

Participant (P03) saw things differently, and commented:

"I think that social values, norms, and beliefs are more important in shaping the goal of higher education than society's attitude toward higher education".

The author believes that these contrasting views may be due to the gender and cultural background of the participants.

The parents' views on the cultural factors did not differ from those of their student offspring. Participant (P01) commented:

"I believe that Bahrain has transcended the cultural and social barriers, so I don't think that shaping the goal of higher education is very much affected by the cultural aspect as there is no problem for girls and boys studying together anymore".

Participant (P04), due to his conservative background, noted:

"Perhaps social values and norms are more important than attitudes toward higher education. Parents tend to push their children to certain disciplines to gain social status even if these children are uninterested in studying those majors".

Again, these different opinions are the result of different cultural backgrounds and beliefs.

Likewise, the HEI administrators' focus group members agreed that the cultural factor has a positive effect in shaping the goal of higher education in Bahrain.

Participant (FG01) commented:

"Bahrain is an open society, so there are no real problems regarding cultural issues when shaping higher education's goal. For example, we don't have to have separate classrooms for boys and girls. Religion may have some effect on higher education through sectarian differences. Recently, the spread of private schools and the Western open mind-set caused some minor issues that were easily tackled through awareness programmes. The norms and beliefs in Bahrain are changing toward a more open society, where it is normal to work longer hours than we used to".

Most of the participants agree that Bahrain is a modern country that embraces higher education without major reservations regarding social norms and beliefs. All beneficiaries understand that higher education is an open society, governed by rules and regulations and a high awareness of people toward openness and acceptance. Cultural limitations play a minor role when shaping the goal of higher education in Bahrain.

5.3.2.4 Economic Factor

Since higher education is considered one of the pillars of economic growth, there is no doubt that economics is the most important factor shaping the goal of higher education in Bahrain? The main outcome of higher education's goal is to develop and enhance the economic growth of the country. Across the spectrum of primary beneficiaries, there is a consensus that the average income plays an important role in shaping the goal and attributes of the HEIs in Bahrain. The HEI administrators believe that parents will pay for the higher education of their children, regardless of their economic status and average income, as they see this as a lifetime investment.

The higher education students believe that the average income of the individual in Bahrain plays an important role in shaping the goal of higher education, as this goal will depend on the capability of the parents to pay for their children's higher education. Participant (P03) stated:

"In regard to economics, I think that the average income plays the most important role when shaping the goal of higher education. Institutions face economic problems as they depend on external elements for their financial survival, including tuition payments provided by the students and their families, funding from the government to cover operating expenses, research and training".

Similarly, Participant (P02) stated

"The average income is the most important factor in shaping the goal of higher education. At the same time, the nature economy of the country should contribute to the shaping of higher education's goal".

The above findings confirm that the economic factor is clearly appreciated even by higher education students who usually do not pay for their education in Bahrain, as they are sponsored by either the government or their parents.

The parents emphasised the importance of the economic factor in shaping the goal of higher education. Participant (P04) indicated:

"I believe that the average income plays the most important role in shaping the goal of higher education for me, as a parent, as I want to cover the cost of higher education through finding a well-paid job for my child. Some parents will choose a programme based on their economic status rather than their children's interests".

Participant (P01) added:

"I think that the average income and the nature of the economy are the most important factors in shaping the goal of higher education but, unfortunately, I think that shaping the goal of higher education is happening in a haphazard manner".

Both higher education students and their parents see the importance of the economic factor in shaping higher education's goal in Bahrain, as it contributes to economic growth and development.

The HEI administrators' focus group viewed this factor differently; as they believe that the government subsidy of higher education in the public sector plays an important role in national higher education development. Focus group member (FG01) commented:

“Because of the subsidy by the government, more students are attracted to the public universities and that is why I believe that the average income must be considered when shaping the goal of higher education. I believe that any Bahraini will pay for higher education, even if it stretches his budget, to see his child graduate with a degree. Our university has the highest employability rates of all HEIs simply because we involve industries when designing our programmes”.

Overall, the economic factor is important when shaping the goal of higher education in any country, as it is simply the driving force of life. The nature of the economy of any country dictates the type of programmes offered as well as the number of higher education graduates. Some countries need more vocational than academic higher education courses to ensure that a skilled workforce is produced to enhance the economy. A better economy means a greater capability to invest in higher education, whether publicly or privately, and locally or abroad.

5.3.2.5 Rules and Regulations Factor

Among the five external factors, the researcher concluded that the regulatory factor is more relevant to the private HEIs than the public ones, as the latter are more secure and protected from the government. For that reason, the parents and students prefer public HEIs. The beneficiaries agree that the rules and regulations affect the HEIs more than the students and there is a clear shortage in understanding of these rules among the students and their parents. The HEI administrators believe that the rules need to be revisited in order to serve the goal of higher education.

The students believe that the regulatory factor is more relevant to the HEIs than to themselves, as was evident from their response to the significance of this factor and its sub-factors. Participant (P03) highlighted the importance of the rules and regulation factor by saying:

“For me, a student, I think the rules and regulation for higher education are there more to protect my rights and the HEIs are more affected by these rules than me. Increasing the tuition fees of HEIs will not have a significant impact on the enrolment and completion of higher education because my parents, for example, are willing to invest in my higher education even if it costs more”.

Another participant indicated that she was not fully aware of the rules and regulations governing the higher education sector in Bahrain. She commented:

“I am unaware of the rules and regulations concerning higher education in Bahrain and therefore I cannot see any role for them in shaping the higher education goal in Bahrain. I believe that the HEIs’ tuition fees and financial policies play an important role in the rate of enrolment and competition within higher education”.

The parents, on the other hand, indicated that the government is making insufficient efforts to clarify the rules and regulations concerning higher education and consequently is not playing a full role in shaping the goal of higher education in Bahrain. Participant (P04) noted:

“I think that the rules and regulation must be clear to universities to help them to shape their goal and, at the same time, I believe that these rules must protect the students. Regarding public higher education, enrolling in HEIs is encouraged, but for a hidden purpose, which is to delay an increase in the unemployment rate in Bahrain. On the other hand, private HEIs face difficulties in attracting students due to their high tuition fees and lack of programmes required for the future”.

On the other hand, the HEI administrators’ focus group members were the most aware of the regulatory role in shaping the goal of higher education in Bahrain but had some reservations regarding the regulatory bodies that lay down these rules and regulations. (FG02) stated:

“The rules and regulations affect the higher education institutions more than students. The rules and regulations of higher education need to be revisited due to the global changes and increased competition. I think that our financial policies encourage students to enrol and complete their higher education, but I think that, in future, the mind-set must change, as nothing will for free”.

From this context, it is very clear that this factor has the least importance effect in shaping the goal of higher education, not because it has no effect but because

it is neither circulated to nor understood by the lower level of beneficiaries. It is mandatory to revisit the extant rules and make them more relevant to higher education's goal in Bahrain. Recently, Bahrain's rules and regulations regarding HEIs have been tightened to protect the reputation of the higher education sector from what are known as commercial HEIs that open for business more than education.

5.3.3 The influence of the goal on the attributes of the HEIs

After defining and understanding the external factors affecting the higher education sector in Bahrain, it is important to explore how the higher education goal, as defined by the government, impact on and draw the basic lines of HEIs' attributes. For this section, the researcher asked the interviewees whether they are aware of the defined goal and how they are aligned with the extant higher education policies. In addition, the researcher enquired about the role of HEIs in fulfilling the goal and how the environment affects the goal of higher education. This section will address the influence of higher education's goal on its attributes through exploring the participants' views on the definition of higher education's goal, the alignment of the extant policies with the defined goal, the role of HEIs in fulfilling the goal of higher education, and finally the Effect of the Environment on Higher Education's Goal.

5.3.3.1 The defined goal of higher education

Within the Higher Education Council Document entitled the National Higher Education Strategy 2014-2024 issued in 2014, the following vision was stated;

“To position Bahrain as a regional hub for quality higher education, producing graduates with the skills, knowledge, and behaviours required succeeding in the global knowledge economy while contributing to the sustainable and competitive growth of Bahrain”.

This vision required high level system objectives to underpin the above-mentioned vision. These objectives included to provide a higher education ecosystem that caters for students from GCC and beyond, an education that is

relevant to the demands of industry and business in the 21st century, and a higher education that is diversified to meet the needs of different students' aspirations.

The interviews revealed the following findings: the parents and students alike had no idea about the defined goal of higher education and saw it purely as a natural progression from high school. Some students and parents related it to the Bahrain 2030 vision but did not have any further knowledge about this. On the other hand, the HEI administrators had a better grasp of the goal of higher education, that were taken into consideration when redesigning programmes. Participant (P03) said:

"I really don't know the defined goal of higher education in Bahrain, but I believe that the goal is derived from Bahrain vision 2030".

Likewise, there was a clear gap between the defined goal and objectives and the parents' awareness of these objectives. For example, participant (P04) noted that:

"To be frank, I don't know the defined goal, but I believe the Bahrain Vision 2030, published in 2008, serves as a basis for the higher education goal of the state".

Moreover, participant (P01), who is a parent of a recent higher education graduate, stated:

"I don't know of any defined goal for higher education in Bahrain, but I believe that the defined goal must focus on the creation of prepared minds that fit well with the trend in higher education".

Similarly, participant (P02) stated:

"I would like to say that, as a society, we don't have that mentality. All we think about is that higher education is a natural progression from school and to keep our children longer without responsibilities".

A better understanding of the goal and objectives was apparent among the HEI administrators' focus group members. Participant (FG01) clearly stated that:

"Luckily, we are working in an institution where all administrators and students are aware of all initiatives and new projects regarding the higher education sector in Bahrain. The head of the university keeps us

informed about the country's requirements so that we can redesign the programmes accordingly”.

Overall, there is a huge gap between the policy-makers and inputs (students and their parents) regarding defining and knowledge of higher education's goal, which leads to haphazard planning for high education due to the lack of understanding of the influencing factors that shape and define its goal. There is no clear relationship between the goal of higher education and the strategies and operational plans of the Ministry of Education, even following the formation of the Higher Education Council in 2005, that was established to regulate the licensing of HEIs rather than plan and fulfil goal.

5.3.3.2 The alignment of the policies with goal

By default, if the main beneficiaries in higher education (the students and their parents) are unaware of the defined goal and objectives, then they will be equally unaware of the policies and their alignment with this defined goal. The beneficiaries agree on the weakness of the current policies to fulfil the goal. They stress that there is no problem in drawing up these policies, but a huge problem regarding their implementation. The administrators have a better understanding of the problems associated with the policies and define them by the silo system in which the higher education entities work and perform, which means that there is a lack of integration between the entities serving the higher education sector.

This was clear from the answers of interviewees, regardless of their category. Participant (P02) indicated:

“To be completely truthful, I have to admit that I am unaware of the policies and goal. All I knew was that I wanted to finish my higher education to get a job and, because I was on a scholarship, I had no idea about my tuition fees at the university I studied at”.

Participant (P03) simply added: *“I believe that there is a gap between the goal and the policies”*. One parent summed up this issue by saying:

“I believe that the structure and policies are good, but we have problems in implementing these policies”.

Furthermore, the parents were clearer in expressing their views. Participant (P01) indicated that:

“I see that policies aren’t aligned with the goal of higher education and are randomly planned and executed”.

Participant (P04) had a different perspective on the relationship between goal and the extant policies, and commented:

“I believe that the structure and policies are good, but we have problems in implementing these policies”.

The responses from both the students and parents clearly show that there is a problem with the extant higher education policies and goal.

On this point, the HEI administrators’ focus group members agreed with the other beneficiaries (students and parents), that a gap exists between the goal and objectives, and the policies governing higher education in Bahrain. Participant (FG01) stated:

“Unfortunately, higher education entities work in silos, which really wastes a lot of time and effort. There is a gap between the policies and defined goal at all levels. An institution’s mission and goal may conflict with the best interests of the higher education system. For example, a regional PhD-granting institution may desire to expand its mission and greatly increase its research production. Similarly, a community college may desire to offer bachelor’s degrees in applied fields. While both may be worthy objectives for an ambitious institution, such goal may compete with those of other institutions that are already addressing these needs”.

The researcher concluded that all the primary beneficiaries believe that a gap exists between the strategies and policies regarding higher education and that different entities work in silos when it comes to aligning the goal with the policies. It is obvious that the magnitude of the Ministry of Education’s responsibilities hinders its ability to manage higher education with assistance.

5.3.3.3 The role of HEIs in fulfilling the goal of higher education

One of the main roles of HEIs is to fulfil the defined goal and objectives of higher education in Bahrain. The researcher wished to explore the truth behind this statement through the views of the concerned beneficiaries. The findings were surprising, as the primary beneficiaries (students and parents) thought that the public higher education sector is more trustworthy than private HEIs in Bahrain. There is a common belief that the public HEIs are doing more to fulfil the goal of higher education than the private ones. Administrators view their role as satisfactory in fulfilling the goal of higher education considering the amount of resources available.

The higher education students' opinions on the issue varied. For example, participant (P03) stated:

“I believe higher education is more into satisfying the market than the goal of higher education in the country”. On the other hand, participant (P02), a higher education graduate, indicated that; “From my experience of the university I graduated from, there was a solid link between Bahrain vision 2030 and the mission of the university”.

On the contrary, the parent's displayed a full understanding of what the government is trying to do to fulfil the goal of higher education. Participant (P04) noted:

“I think there's a link between the state's goal and the planning of the programmes especially on the applied side through designing some programmes that serve 2030 vision”. Parent (P01) added: “I believe that the state's investment in education in general and higher education must be repaid through the performance of HEIs”.

When attempting to justify the authorities' performance, the HEI administrators' focus group members were very diplomatic. Participant (FG03) commented:

“They are trying their level best to fulfil the state's goal, as we cooperate with other HEIs over certain programmes. It is supposed to prepare students for the labour market and increase their knowledge, but there is a gap in both goal as they are not very well planned and executed”.

The public HEIs are more oriented toward fulfilling the state's goal of higher education than the private ones, making them a better option and choice for students. This places greater pressure on the public HEIs to accept students and ensure that they graduate to achieve the goal of higher education

5.3.3.4 The Effect of the Environment on Higher Education's Goal

The following section of the interview aimed to explore the views of concerned beneficiaries regarding whether the goal of higher education in Bahrain suited the unique environment of a small country with limited resources. The findings showed that it was commonly agreed that the goal of higher education in Bahrain were not based on the environment. On the other hand, the HEIs administrators' focus group members claimed that several steps were taken into consideration in order to shape higher education goal that were based on the environment, but that these were happening slowly and without a clear strategy, despite the published National Higher Education Strategy (2014).

The primary beneficiaries (students and parents) had a negative perception regarding the question of whether the goal of higher education was shaped based on the environment of Bahrain and indicated that they are not even aware of the specific goal. Participant (P03) declared:

“Since I don't know the goal, then I don't know how they were shaped or if the environment was considered”. Participant (P02) was clearer on this issue and said: *“I don't think that the goal of higher education was shaped based on the external factors of the environment”*.

The parents had a similar impression. (P01) said;

“To be frank, I don't believe that the goal was shaped based on the environment as most of our plans are adopted from different countries with different environments”. Participant (P04) shared this opinion and noted: *“I don't believe that the environment factors in Bahrain were taken into consideration when shaping the goal of higher education as most of the initiatives were imported and canned”*.

From the point of view of the HEIs administrators' focus group, the issue was slightly different, as they are more familiar with the process because of their jobs. Participant (FG02) believed that at the beginning of the higher education

boom in Bahrain, there was no link between the local environment and the defined goal, and said;

“Initially, no, I believe it was a haphazard process, but it’s becoming systemized at a slow pace. We have a very good strategy; it is not equally good in terms of implementation. There are many resources available, but we lack the right way to employ and manage those available resources”.

To sum up, the researcher noted some similarities and differences between the views of the concerned beneficiaries. There was a general agreement that the goal of higher education in Bahrain were not shaped based on Bahrain's environment, but rather were more canned and imported from other developed countries. On the other hand, the administrators claimed that several steps were considered when shaping higher education’s goal, based on environment, but that these were being followed at a slow pace and without a clear strategy.

5.3.4 The relationship between the attributes and benefits of higher education

This section explores the relationship between the attributes and benefits of higher education based on the Means-End Theory, which is the focal theory of this research. Understanding this relationship will help the researcher to build a solid argument that such a relationship will assist the attainment of the goal of higher education in Bahrain. The questions related to this theme were divided into three sub-themes; the effect of higher education’s goal on the attributes of higher education, the attributes of successful HEIs, and how these attributes are prioritised.

5.3.4.1 The effects of goal on attributes

The findings revealed that opinions varied among different beneficiaries even within the same category (HEI students). There is a strong belief that goal must be linked to attributes, but there is no visible relationship between them. The HEI administrators’ focus group had a clear idea of this relationship but stated that it lacked practical policies to implement it. The students emphasise that the most important attribute is the quality of the teaching. Participant (P02) noted:

“What matters to me, as a student, is the quality of the teaching and learning of the HEI, regardless of the goal set by the state for higher education”, whereas participant (P03) believes that attributes must be linked to the environment of Bahrain: *“I strongly think that the attributes of HEIs must be driven from the goal of higher education based on Bahrain’s environment”*.

The parents believe that, since the defined goal are unclear, then the attributes will be as well. Participant (P04) said:

“I don’t think that the defined goal helped in defining the right attributes of HEIs, as we see a lot of programmes with poor outcomes”. Participant (P01) had a clearer picture of the relationship and indicated: *“The attributes must be linked to the goal of higher education but, in Bahrain, there is a gap between the goal and attributes of HEIs”*.

On the contrary, the HEIs administrators’ focus group members believe that the relationship is very clear and well-established. Participant (FG01) claims that:

“The national programme strategy mandates that any programme must embed the strategy of developing education and training and helping to achieve the state’s goal”.

In general, it is obvious that the goal and attributes lack a solid relationship that links the goal and attributes of higher education. Although efforts have been made to shape the attributes of HEIs based on the goal, a huge gap exists between the knowledge of the goal and the attributes, which leads to haphazard choices of HEIs by parents and students.

beneficiaries revert to word of mouth when making their decisions and some see higher education as a natural progression from high school. The lack of knowledge about the state’s goal leads to an inability to define the attributes of a ‘fit for purpose’ HEI or programme. The missing relationship between the goal of higher education and the suitable attributes is responsible for the lack of ‘fit for purpose’ HEIs’ attributes. Insufficient attention is paid to the purpose of higher education and its role in developing the national economy. On the contrary, the random spending is placing a burden on Bahrain’s economy.

5.3.4.2 The attributes of a successful HEI

In this section, the researcher explored the views of the concerned beneficiaries regarding the attributes of a successful HEI that attains higher education benefits and so, in turn, achieves the goal and objectives of higher education in Bahrain. The findings reveal a common lack of knowledge about higher education's goal, so it was difficult for the students and parents to define the attributes of a successful HEI. On the other hand, the administrators had a more academic opinion when it comes to defining the attributes of a successful HEI.

The higher education students had a general idea about the attributes of a successful HEI. Participant (P02) said:

“Successful attributes of HEIs should include good communication between the institution and the student, a good curriculum, and modern methods of teaching based on problem-based learning”.

Another participant emphasised that the attributes were irrelevant, and what mattered to him was the programme that he wanted to study. (P03) commented:

“I don't really know, but I chose the ICT programme at my university because I wanted to study this area in order to pursue a career in communications”.

The parents, on the other hand, were more realistic and said that, since they did not know the goal, they could not specify the attributes. Participant (P01) stated this clearly when he said:

“If I don't know the goal, how can I know the attributes? Consequently, for me, as a parent, a successful HEI will be the one that can help my daughter or son secure a job and one that offers quality teaching and learning”.

Participant (P04) answered this question very succinctly:

“If I don't know the goal, how can I know the attributes?”

The HEI administrators' focus group members believe that the successful attributes of any HEI must be aligned with its mission. (FG02) stated:

"In short, I believe that the successful attributes of any higher education institutions must be aligned with the mission of that HEI".

This section found clear differences between the beneficiaries' views regarding a successful HEI's attributes. On the student and parent level, there is a severe lack of knowledge about the defined goal of higher education, leading to uncertainty about successful HEIs' attributes, which forces them to adopt the word of mouth strategy to identify the attributes of a successful HEI. As participant (P02) said:

"Successful attribute of HEIs should include good communication between the institution and the student, good curriculum, and modern methods of teaching based on problem-based learning."

5.3.4.3 Prioritising the attributes of higher education

Here, the researcher explored how the concerned beneficiaries in higher education prioritise the attributes of the HEIs. In this regard, both the students and parents think that the most important attribute of an HEI is its ability to secure jobs for its graduates, whereas the HEI administrators believe that it is to prepare students with the skills required for jobs to be created in the future through pre-planned programmes. These different views clearly show that there is a gap in disseminating the ideas and goal of higher education.

The students and parents emphasise that the most important attribute of HEIs is to secure jobs for their students on graduating. Participant (P03) noted:

"The most important priority for me is that the HEI can help me to find a job for me when I graduate". Participant (P02), on the other hand, stated *"The most important attribute I look for in an HEI is a good curriculum, and modern methods of teaching based on problem-based learning".*

The parents' perspective was similar when asked about prioritising the attributes of HEIs. Participant (P01) said:

"The most important attribute of HEIs is that they can secure jobs for their graduates". Participant (P04) added: *"This can be achieved by presenting a road map of the economy to beneficiaries so that each one plans and decides the 'fit for purpose' attributes of higher education".*

On the contrary, the HEI administrators' focus group members indicated that;

“The most important attribute of a successful HEI is the quality of the teaching and learning approach and it is equally important that it should offer programmes that prepare graduates for the jobs to be created in the future and avoid programmes with a high rate of inflation”.

Participant (FG01) emphasised the importance of a quality teaching and learning strategy as the top priority of any successful HEI.

To sum up, there appears to be a limitation in cornering the attributes of HEIs to secure jobs for their graduates must be changed through spreading the word that the most important attribute of HEIs is to provide the necessary skills to enable graduates to pursue their desired career and contribute to the development of society. The understanding of the benefits of higher education was the weakest link most beneficiaries which a natural thing since most of them are unaware of the goal or attributes of a 'fit for purpose' HEI or programme. It is striking that most beneficiaries are society-oriented when it comes to defining the benefits from a moral perspective, but individually-oriented when it comes to the economic aspect, as most beneficiaries emphasise the higher chance of employability and improved socio-economic status.

5.3.5 Higher Education's Benefits

After determining the views of the beneficiaries concerning the external factors that shape higher education's goal, the influence of these goal on the attributes of HEIs, and the relationship between the attributes and benefits of higher education, it is important to explore the benefits of higher education through the eyes of the different beneficiaries to see whether they have a common understanding of these benefits and if they are derived from the attributes and lead to the goal of higher education, in accordance with the research's focal theory (Means-End Theory). This will be achieved by using two sub-themes.

5.3.5.1 The definition of higher education's benefits

The primary beneficiaries (students and parents) defined the benefits of higher education as its ability to increase the chance of employment and increase the

knowledge and skills of the students. On the other hand, the administrators focus more on the benefits related to society than on those related to individuals.

Participant (P03) expressed his views on the benefits of higher education as follows:

“The most important benefits of higher education, in my view, are to increase the chance of employment, improve my lifestyle, and lower the unemployment rate”.

Participant (P02) added:

“Gaining new knowledge, skills, and team work were the main benefits of higher education”.

This clearly shows that the participants’ views and opinions vary regarding the benefits of higher education.

The parents viewed the benefits of higher education from a societal aspect.

Participant (P04) said:

“The most important benefit of higher education, from my point of view, is the prosperity of society and the increased awareness of it. Furthermore, the production of knowledge, the increase in average income and, consequently, the development of the country's national economy”.

On the other hand, the HEI administrators’ focus group was more diplomatic and academic regarding this issue. (FG02) stated:

“The benefits should cater to the mission. The most important benefit of higher education is to provide the labour market with capable students to face life challenges and produce graduates who are knowledgeable in their field of study, people with greater leadership skills”.

The definition of the benefits of higher education is divided into two main categories. The individual aspect mainly focuses on securing a job, increasing the chance of employability, and gaining new knowledge and skills, while the societal part is linked to developing the national revenues and providing the labour market with a skilled work force that can contribute to the nation’s economy and development.

5.3.5.2 The main driver for attaining the benefits of higher education

This section aimed to discover whether the benefits of higher education differ from one country to another, as the researcher asked the interviewees to determine the main driver for them joining HEIs and the benefits of higher education. These questions were drawn from a UK-based study on the main reasons for joining higher education. The findings revealed that all the beneficiaries regard higher education as a means of gaining a better life in the future. The reasons for joining higher education differ from one individual to another and from one country to another.

During the interview, participant (P03) revealed that studying a subject, pursuing a career, changing his life, being more independent and freer, having a good time, and meeting new friends were the most important reasons for him joining higher education, whereas participant (P02) stated:

“I went to university to get a degree that will help me to find a good job that will make me a contributing member of society”.

The parent’s views were more economics-oriented. One parent stated:

“From my point view, as a parent, I think that the most important reasons when thinking about joining higher education are studying a subject, pursuing a specific career, getting a job, and making more money”.

Another indicated that going to university reasons differs from one country to another due to its awareness and the nature of its environment. Currently, he thinks that going to university is a natural progression within an individual’s education.

The HEI administrators’ focus group members found that, in their experience, most students join HEIs to secure a job and enjoy a better socio-economic status. This was very clear when participant (FG03) noted:

“I believe that the most important reasons for joining a higher education in Bahrain are: to obtain higher earnings and a better socio-economic status”.

The researcher concluded that, in Bahrain, the most important reasons for joining higher education are to obtain higher earnings and a better socio-economic status. This may differ in other countries, depending on the external environmental factors mentioned in the study. For example, developed countries benefit from higher education in the field of research and development whereas, in Bahrain and its region in general, higher education benefits are more individualised: to achieve a better life through gaining prestige and improve one's socio-economic status.

5.3 Pilot Study Key Finding

The above findings were analysed using NVIVO software for coding. (Dollah *et al.*, 2017) noted that NVIVO software can be timewasting, unable to interpret and expensive for individuals. Despite that NVIVO was used in participants' categorisation according to status using tree coding method shown in figure 5.1 below. In addition, NVIVO was used to code interviews terminology as shown in appendix section.

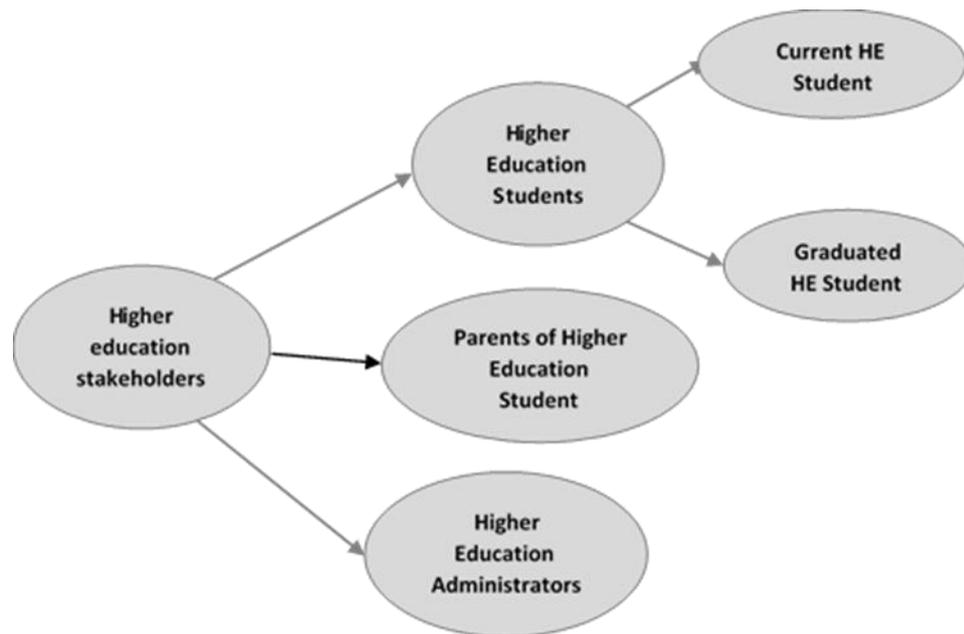


Figure 5. 1 Participants Tree Coding using NVIVO

The pilot study revealed significant findings and led to important conclusions that can be summarised as follows:

- Higher education students and parents alike have little or no awareness of any defined higher education goal. However higher education administrators are more oriented with government's higher education goal.
- Minimum knowledge of higher education structure is present among HEI students and parents compared to HEI administrators.
- Higher education is seen as a natural progression of high school to most students and parents.
- There is consensus that higher education polices, and its implementation is random and haphazard in times.
- Most students think that the benefit of joining higher education is to secure a job and improve socio-economic status.
- All concerned beneficiaries agree that decisions made based on local environment will result in a better higher education sector.

5.4 Chapter Summary

This chapter presented and analysed the findings of an in-depth pilot study conducted in one of Bahrain's public HEIs. The findings reported from the pilot study covered five main themes. The first theme was the understanding of higher education's importance, structure, and evaluation. The second theme was the effect of external environmental factors on higher education's goal. The third was the influence of this goal on the attributes of HEIs. The fourth addressed the relationship between the attributes and benefits of higher education. Finally, the fifth theme discussed higher education's benefits in Bahrain.

All the above themes were assessed from the perspective of higher education students, the parent of higher education students, and finally administrators of a public HEI in Bahrain. The findings of the pilot study offered the researcher a solid grounding in and better understanding of the higher education sector in Bahrain and revealed many of the beneficiaries' perspectives concerning higher education.

CHAPTER SIX-CASE STUDY FINDINGS AND ANALYSIS

6.1 Introduction

In the previous chapter, the researcher presented and analysed the findings of the pilot study of this thesis. This chapter aims to present and analyse the findings of the main study of this thesis. In doing so, the researcher presents and analyses the empirical data collected from a well-established public HEI in Bahrain.

The data collected were utilized to investigate: (a) the understanding of higher education's importance; (b) the effect of external environmental factors on higher education's goal; (c) the influence of this goal on the attributes of HEIs; (d) the relationship between the attributes and benefits of higher education; and, finally, (e) higher education's benefits. However, the analysis of the empirical data should not involve a comparison of the findings of the pilot case study and the main study. Instead, the researcher presents an empirical analysis of a different case study perspective that describes individual and organisational behaviour and perceptions during the assessment of the higher education sector using Means-End Theory.

Thus, rather than generalizing the results of both cases, the researcher proposes to inspect each one by describing the respective approaches defining the benefits of higher education, and so allow others to draw parallels in the outcome. This chapter commences by providing a background to the HEI under investigation. Using the conceptual model presented in Chapter 3, and through interviews, the researcher will investigate the importance of higher education to different beneficiaries and their understanding to its structure and methods of evaluation. Then, the researcher assesses the external factors shaping higher education's goal in Bahrain and the influence of higher education's goal on defining the attributes of HEIs. After that, the researcher will investigate the relationship between the attributes and benefits of higher education. Finally, the thesis presents some of the most popular benefits of higher education according to the concerned beneficiaries.

6.2 Case two (main) HEI-Y

The subsequent findings were based on one-to-one interviews with two higher education students from HEI-Y, and two parents of current and graduate students. In addition, data were collected from a focus group of five current and former HEI-Y administrators. Some of the interviews were conducted in English and others in Arabic, due to the level of the interviewees' English language, to ensure that the full spectrum of questions was covered.

HEI-Y is considered the biggest HEI in Bahrain. It fosters most high school graduates and some from neighbouring countries due to its reputation for being a strong HEI with high standards that is trusted by the labour market. HEI-Y was established by the government of Bahrain with a vision that it would "Become a world-class university that is recognized as a teaching, research and entrepreneurial institute". HEI-Y's mission states that it contributes directly to the economic growth and development of Bahrain, supported by leading edge teaching, technology and research, with a regional impact.

Table: 6. 1 Participants in the case study

Participant number	Category	Brief description
P 05	Higher education graduate	34-year-old male
P 06	Current higher education student	18-year-old female
P 07	Current higher education student	20-year-old male
P 08	Recent higher education graduate	22-year-old female
P 09	Higher education graduate	27-year-old female
P 10	Current higher education student	21-year-old male
P 11	Parent of (P 07)	58-year-old female
P 12	Parent of (P 10)	49-year-old male
P 13	Parent of (P 09)	52-year-old female
FG 2-1	Higher education administrator	Retired academic staff
FG 2-2	Higher education administrator	Current dean of registration
FG 2-3	Higher education administrator	Retired academic staff
FG 2-4	Higher education administrator	Retired academic staff
FG 2-5	Higher education administrator	Retired dean of admission

6.3 Findings and Analysis

As stated above, the data for the main case study were collected in two different ways to ensure authenticity and as a type of data triangulation. The first type of data collection method was semi-structured, one-to-one interviews with two students; one a current student and the other a recent graduate. In addition, two parents of the above-mentioned students were interviewed separately. The second type of data collection method was the focus group, in which five current and former HEI-Y academics answered the same set questions in accordance with the research propositions. These answers were sub-divided into five main themes, as detailed below.

6.3.1 Higher Education's Importance, Structure, and Evaluation

This section discusses the higher education sector's importance, structure, and means of evaluation in Bahrain. It aims to explore how the participants understand and conceptualize the higher education sector, and to compare the understanding of different beneficiaries regarding this theme.

6.3.1.1 Higher Education's Importance

Although all the participants at all levels agreed on the importance of higher education, their views varied, and their answers reflected their respective role. Participant (P05), a higher education graduate, noted that:

"Higher education is extremely important as a degree has become what employers look for when someone applies for a job. Higher education is equally important for the individual as a way of continuously developing one's knowledge and skills".

His views reflect the role of a higher education degree in securing a job as a priority. Another higher education graduate (P08) expressed his views on the importance of higher education by saying

"The importance of higher education lies in developing the knowledge and skills of individuals that, in turn, reflect on society in general".

Her views reflect the intangible aspect of higher education's importance to the individual as well as society. A third graduate (P09) had a different, interesting view on the importance of higher education, and said

"I think the importance of higher education in Bahrain depends on personal goal and skills. For example, if a person is technically skilled, I don't think higher education is important for him. In our society, higher education has become the norm, which means that everyone wants a degree, which in turn reduces the value of higher education degrees".

Her views show that the importance of higher education depends on the personal goal that an individual is trying to achieve.

On the other hand, the current higher education students had different views on the importance of higher education in Bahrain. Participant (P06) stressed that:

"Higher education is important as it is the only way that I will get a job and it is important for the state because it improves the level of development".

Similarly, Participant (P10) said:

"Higher Education is important because it provides a better chance of employment for graduates so, the more educated you are, the more attractive you become to the market".

From the above, the current higher education students view higher education as a key to securing entry to the job market and starting to earn money.

On the other hand, there were various aspects ascribed to the importance of higher education. (P12) highlighted that:

"Higher education is important to Bahrain because it provides the market with a workforce in all walks of life and is equally important for individuals because it is part of human development. One more important thing I want to stress is that, as much we need higher education, I think we need vocational training to fill the gap in technicians and a skilled workforce".

The researcher believes that Participant (P12) has been influenced by his position in the decision-making circle, as he holds a public office. (P11) adopted a similar stance, and declared:

"Higher education plays an important role in developing society and helping to replace outside experts with Bahrainis who are highly-

educated. From the individual perspective, higher education opens the doors to opportunities and job vacancies".

Another parent, when asked about her views on the importance of higher education, commented:

"Higher education in any country is an indicator of how this country is developing. For the individual, higher education is important because it increases knowledge and, in turn, develops the individual".

From the above, the researcher observed that the parents have a wider picture than the current higher education students do.

Finally, the HEI administrators had an even wider vision of the importance of higher education in Bahrain. This was very clear from Participant (FG 2-4)'s response regarding this issue:

"The problem with higher education in Bahrain is that it became restricted to academic degrees and neglected vocational education. That made parents and students turn their backs on vocational training because those graduates will not be regarded as highly educated, simply because they don't have an academic degree. Therefore, higher education is unrelated to real life practice. For example, a law graduate will have a degree without any real-life experience".

Another participant answered this question more directly, noting that:

"The general goal of higher education is to create a good citizen to develop society. We need to foster higher education because it produces knowledge as a resource, just like other available resources like the oil and gas and industries. To develop society, we must start by developing education and fostering knowledge management. Education must be detached from the labour market. Higher education must lead to sustainable development instead of only feeding the labour market" (FG2-3).

A third administrator (FG2-2) stated:

"Apart from being important to the economy, I think that higher education is extremely important in creating citizens capable of developing the whole society".

The empirical findings revealed an exceptional awareness of the importance of higher education to the individual as well as society, although the beneficiaries adopted different stances.

6.3.1.2 Higher Education's Structure

Unfortunately, higher education's structure in Bahrain seems to be ambiguous to students and parents alike. The interview responses revealed a lower understanding of how the higher education sector is structured and that might be due to many reasons. For example, the state does not appear to have informed the concerned beneficiaries about this topic, as most people regard higher education as a natural progression from high school, and so cannot see much difference in the structure of the higher education sector.

Participant (P06, 07, 08) stated respectively:

"All I know is that higher education falls under the Ministry of Education",

"All I know about the structure of higher education in Bahrain is that it is under the Ministry of Education".

"Higher education in Bahrain is within the Ministry of Education, but I don't know who is specifically responsible for it".

On the other hand, participant (P05), who is a higher education graduate and has a clearer idea of the structure of higher education in Bahrain, said:

"Higher education's role has rapidly developed over the last decade. It is consisting of the Higher Education Council led by the General Secretary of the Council under the umbrella of the Ministry of Education. The role of the Higher Education Council revolves around giving permits to private higher education institutions and approving their certificates along with other degrees from abroad. The higher education role is more regulatory than academic or the evaluation of quality academic programmes".

Similarly, the parents had little idea about how the higher education sector is structured in Bahrain. For example, participant (P11) stated that all she knew was that higher education falls under the umbrella of the Ministry of Education and knew no further details and participant (P12) responded similarly. This reveals a great rift between the authorities and the parents and students when it comes to informing the public about the basic structure of government.

On the other hand, the HEI administrators had a far clearer idea and were even familiar with the historical background of how higher education in Bahrain was shaped. Participant (FG2-4) noted:

"Before the formation of The Higher Education Council in 2005, HEIs were self-governing, without a higher authority. When the HEC was formed, the Minister of Education oversaw the higher education institutions through the administrative role of the Higher Education Council".

Participant (FG2-3) added:

"The Ministry of Education is the higher authority of higher education through the Higher Education Council; from my personal point of view, I believe that higher education in Bahrain must have its own ministry or authority".

From the above, a gap exists between most of the students and parents' awareness of the issue and the detailed knowledge that the HEI administrators have about how the higher education sector in Bahrain is shaped and structured.

6.3.1.3 Higher Education's Evaluation

The evaluation of the higher education sector is another area where there is no clear picture about how it is performed or who is responsible for it. Again, students and parents are the weakest link among the concerned beneficiaries, as they have little or no idea about who evaluates the higher education sector in Bahrain or how.

Participant (P06) simply stated that she has no idea if higher education is evaluated or checked. Similarly, (P10) stated that:

"I really have no idea how higher education in Bahrain is organized, but all I know that it is part of the Ministry of Education".

Participant (P05), a higher education graduate, demonstrated a better understanding of how higher education is evaluated, and noted that:

"Only recently did I become aware of any evaluation of HEI after some issues were raised concerning the accreditation and approval of some private HEI, but unfortunately I have no clear idea or details of such evaluation".

Moreover, participant (P07) stated:

"I have very little idea about the quality evaluation process or the quality of HEIs in Bahrain. In fact, all I know is that our university requires academics to have a PhD to teach because they are part of an international evaluation programme".

This again reflects a shortage of publicity and information on how higher education is evaluated in Bahrain.

The parents were again like most of the students, as they had little idea of how higher education is evaluated in Bahrain. In fact, participant (P11) stated that, as far as she knew, HEIs in Bahrain are evaluated by the quality assurance authority, but she did not know under what criteria and did not believe that this was sufficiently efficient. Participant (P12) similarly commented that:

"I know that there is a quality assurance body that inspects HEIs and their programs, but I don't know any specific details".

One parent had a general idea of how higher education is evaluated, and responded:

"I think that higher education institutions in Bahrain are evaluated by the quality assurance authority that publishes reports in the newspapers". (P11).

This shows that a limited understanding exists among the students and parents alike regarding the evaluation of the higher education sector in Bahrain.

On the contrary, the process of evaluating the HEIs seems to be very clear among the HEI administrators, as it is part of their job. Participant (FG2-4) stated:

"The increased number of HEIs dictated the establishment of an independent body to monitor the performance of HEIs as part of the Crown Prince Vision for 2030. The idea of evaluation is an important one, in which quality assurance will be checked in two fields. The first one is the institute itself and the other is the academic programmes offered by the HEI".

Furthermore, participant (FG2-3) added that the Quality Assurance Authority is the main entity that evaluates HEIs periodically. It evaluates both institutions

and academic programmes, but I believe that there is still room for further development of the evaluation system. Participant (FG2-2), meanwhile, noted that the evaluation of HEIs in Bahrain is internal, but that the quality is the responsibility of the BQA.

From the above, the researcher concluded that a clear gap exists between the concerned beneficiaries' knowledge when it comes to the importance, structure, and evaluation of the higher education sector in Bahrain. This hinders the mutual understanding and feasibility of any higher education reform planning and implementation. For that reason, the researcher strongly believes that, prior to the implementation of any reform in higher education, an awareness campaign is highly needed.

6.3.2 The Effect of the External Environmental on Higher Education's Goal

Assessing the effect of external environmental factors on higher education's goal is a core element of this paper. The external factors were derived from an existing business model known as a PESTLE analysis, that is used to evaluate the external environment of an organization. The researcher modified this tool to suit the research and the environment of higher education in Bahrain. The main objective of this part of this study is, to examine whether the beneficiaries are aware of the effect of such factors on shaping the goal of higher education.

The external factors affecting higher education were divided into five main factors, with their respective sub-factors. The demographic factor was divided into five sub-factors: population size, gender ratio, average age of the population, socio-economic status, and ethnicity. Regarding this factor, the researcher aims to test the significance of each sub-factor in shaping the goal of higher education. The second main external factor is infrastructure, which was divided into four sub-factors: communication network, digital literacy, road network status, and basic education status. The researcher aims to determine the significance of the preceding sub-factors in shaping the goal of higher education in Bahrain.

The third external factor affecting the goal of higher education in Bahrain is the cultural factor. This was divided into four sub-factors: social values, attitude toward higher education, beliefs, and norms, to test the significance of these sub-factors in shaping the goal of higher education in Bahrain. The fourth external factor is the most important one, which is the economic factor. This is divided into four different sub-factors: average income, GDP, unemployment rate, and nature of the economy. The economic sub-factors proved to be of great significance in shaping the goal of higher education both individually and collectively, as they play an important role in the decision-making process of the concerned beneficiaries. The fifth and final factor is the regulatory factor, which was divided into three sub-factors: Higher Education Council regulations, BQA HEI indicators, and individual HEI regulations.

6.3.2.1 Demographic Factor

All higher education primary beneficiaries agree that the demographic factor is important in shaping the goal of higher education. Most of the beneficiaries believe that there is little significance regarding the gender ratio and ethnicity, as Bahrain is an open society that accepts and respects everyone. On the other hand, some pessimistic interviewees, and especially parents, see the population size as a threat to higher education if it is not dealt with and fear that even ethnicity could become a problem in the future due to political issues. Participant (P11) stated:

“To start with I have no idea of the higher education goal in Bahrain, but I believe that the gender ratio and ethnicity are more important than population size and socio-economic status whereas the average age of the population has no importance in shaping higher education’s goal”.

The HEI administrators had a different opinion regarding the role of the demographic sub-factor in shaping the goal of higher education (FG2-2) said:

“The gender ratio and ethnicity are not an issue in Bahrain. In fact, without looking at it, we find the numbers very close to each other and it is almost 50-50. We take into consideration the natural increase in the population of the country, but we can only accommodate a portion of that number due to the limited resources. We take the maximum we can take without jeopardizing the quality. We don’t look at the numbers

of high school graduates. It was noticed by experience that more females apply for higher education institutions than males”.

The researcher was surprised by the level of awareness of the higher education students concerning the role of demography in shaping the goal of higher education. One student (P08) said:

“Although I don’t know the defined goal of higher education, I think that the gender ratio and social economic status are less important than population size and ethnicity when shaping the goal of higher education in respect to the demographic aspect”.

Below is a summary diagram of how each demographic sub-factor shapes the goal of higher education, based on the participants’ responses.

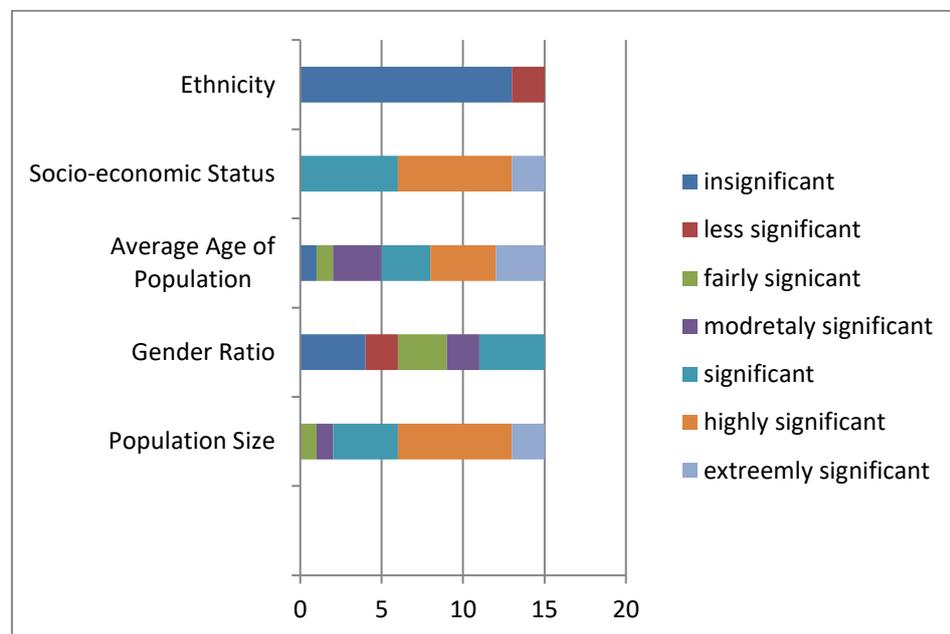


Figure: 6. 1 The effect of demography on goal of higher education

6.3.2.2 Infrastructure Factor

As mentioned above, this external factor was divided into four sub-factors. Below are some of the most important findings of the role of this factor in shaping the goal of higher education in Bahrain. Most of the beneficiaries believe that the basic education status is the most important infrastructure in shaping the goal of higher education. On the contrary, there are contrasting views of the infrastructure factor between beneficiaries when it comes to understanding this factor and how it affects this level. For example, the students

are more worried about road networks and communication and less worried about digital literacy, whereas the parents think that digital literacy and basic education status outweigh other considerations. One higher education student (07) stated:

“I believe that communication networks and road networks are more important than basic education status and I would like to give an example of this. I graduated from the Islamic Religion institute but decided to study ICT because I was interested in the subject”.

Another (08) said:

“I believe that basic education status, digital literacy, and communication networks are the most important factors in shaping the goal of higher education in Bahrain”.

The parents emphasized the role of basic education status in shaping the goal of higher education in Bahrain. (P12) said:

“I believe that Bahrain, being a small size state, makes the infrastructure factor less important, but I believe the basic education status is more important than road networks, digital literacy, and transportation-communication networks”.

The HEI administrators agreed on this topic, and highlighted the importance of basic education status in shaping the goal of higher education:

“Bahrain is a small country, so the road system and communication networks play a less important role in shaping higher education’s goal. On the other hand, basic education status plays an important role as we suffer some weaknesses regarding inputs. Some programs require proficiency in digital literacy, but still the university provides an orientation course to help newcomers to catch up with that. There is a big gap between our standards and the input into life skills” (FG2-5).

The infrastructure factor plays an important role in shaping the goal of higher education and the basic education status must be taken into consideration and developed in a way that is aligned with any defined higher education goal. Other considerations are important in facilitating the achievement of the stated goal. Below is a summary diagram of how each infrastructure sub-factor shapes the goal of higher education, based on the participants’ responses.

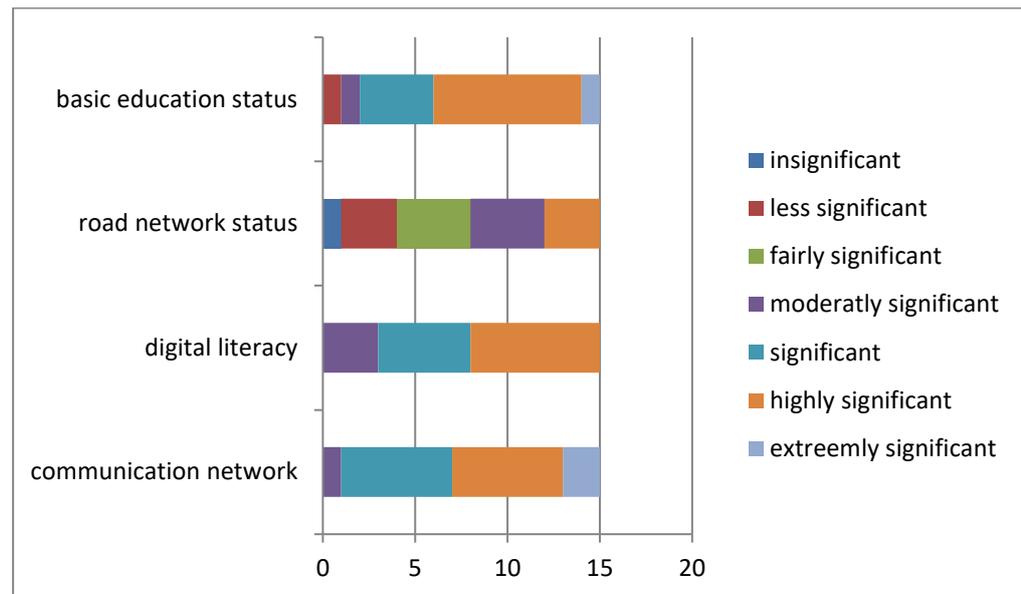


Figure: 6. 2 Effect of infrastructure on the goal of higher education

6.3.2.3 Cultural Factor

Although Bahrain is considered a conservative country due to its geographical location, it is in fact an open, civilized country since education started there earlier than in most of its neighbouring countries. All the interviewees agree that Bahrain is an open society, with a positive attitude toward higher education. There are some minor differences regarding the degree of importance of the cultural factor, but most concerned beneficiaries regard it as a catalyst in shaping the goal of higher education, rather than a hindrance.

Higher education student think that the cultural factor is not an obstacle to the decision-makers when shaping the goal of higher education. For example, participant (P07) said:

“I believe there is an increasing awareness of higher education among parents. On the other hand, the effect of beliefs and norms is decreasing with the increasing importance of higher education”.

Parents agree. Participant (P11) commented:

“I believe that Bahrain has transcended the cultural and social barriers, so I don't think that shaping the goal of higher education is very much affected by the cultural aspect as there is no longer a problem with girls and boys studying together”.

Likewise, the HEI administrators agreed that the cultural factor has a positive effect in shaping the goal of higher education in Bahrain. (FG2-4) commented:

“Bahrain is an open society, so there are no real problems regarding cultural issues shaping higher education’s goal. For example, we don’t have to have separate classrooms for boys and girls. Religion may have some effect on higher education through sectarian differences. Recently, the spread of private schools and the Western open mind-set had led to some minor issues that were easily tackled through awareness programmes. The norms and beliefs in Bahrain are changing toward a more open society where it is normal to work longer hours than we used to”.

To sum up the effect of the cultural factor on shaping the goal of higher education, the following diagram shows the perceived significance of each cultural sub-factor on higher education’s goal.

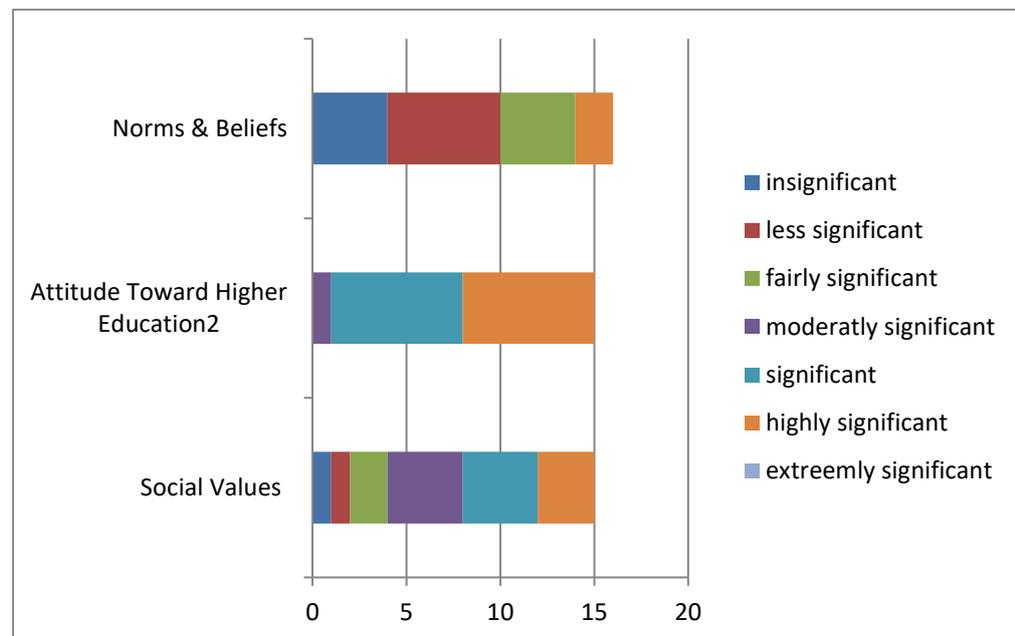


Figure: 6. 3 Effect of culture on the goal of higher education

6.3.2.4 Economic Factor

Without doubt, the economic factor is the most important factor in shaping the goal of higher education in Bahrain because the main outcome of higher education’s goal is to develop and enhance the economic growth of the country. Across the spectrum of higher education primary beneficiaries, there exists a consensus that the average income plays an important role in shaping the goal and attributes of the HEIs in Bahrain. The HEI administrators believe that

parents will pay for the higher education of their children regardless of their economic status and average income, as they see this as a lifetime investment.

The higher education students believe that the average income of the individual in Bahrain plays an important role in shaping the goal of higher education, as this goal will be shaped because depending on the capability of the parents and country to pay for individuals' higher education:

“In regard to the economic factor, I think that the average income plays the most important role when shaping the goal of higher education. Institutions face economic problems, as they depend on external elements for their financial survival, including tuition payments by students and their families and funds from the government, for their operating expenses, research and training”.

The parents emphasized the importance of the economic factor in shaping the goal of higher education. Participant (P12) indicated that:

“I believe that the average income plays the most important role in shaping the goal of higher education for me, as a parent, as I want to cover the cost of higher education through getting a well-paid job for my child. Some parents will choose a programme based on their economic status rather than their children's interests”.

(P23) said:

“I think that the average income and the nature of economy are the most important factors shaping the goal of higher education, but, unfortunately, I think that shaping the goal of higher education is being undertaken with a haphazard approach”.

The HEI administrators view this factor differently; as they believe that the government subsidy for higher education in the public sector plays an important role in the higher education development of the country. For instance (FG2-1) noted:

“Because of the subsidy from the government, more students are attracted to the public universities and that is why I believe that the average income must be considered when shaping the goal of higher education. I believe that any Bahraini will pay for higher education even if it stretches his budget, to see his child graduate with a degree. Our university has the highest employability rates among HEIs simply because we involved industry when designing our programmes”.

Through empirical findings, the economic factor was found to be the most important factor shaping the goal of higher education in Bahrain. Although this might be the case in Bahrain, other factors may be more important in other countries or regions. Below is a summary diagram of how each economic sub-factor shapes the goal of higher education, based on the participants' responses.

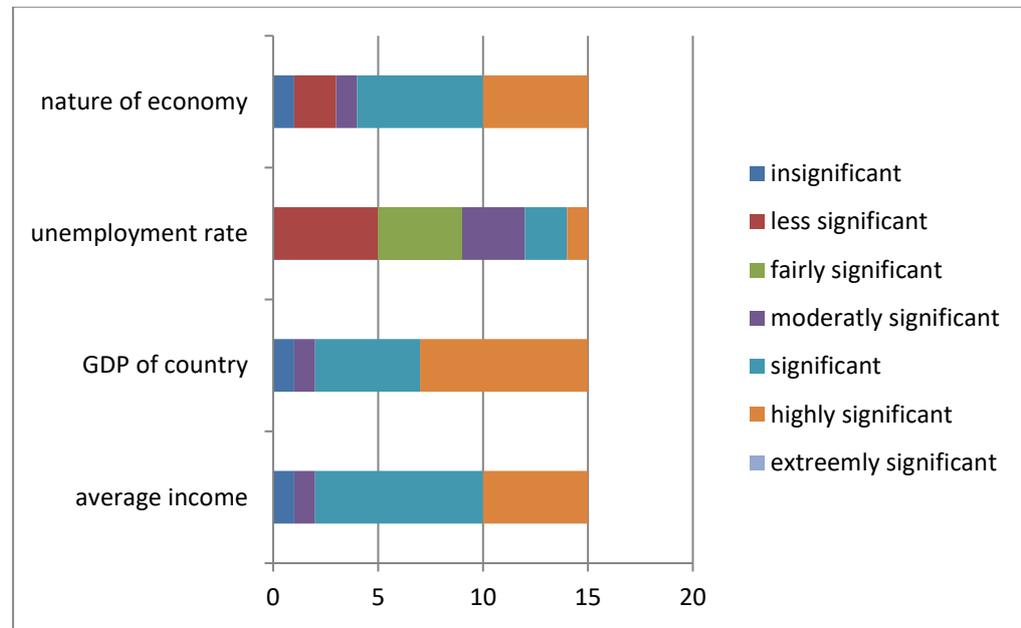


Figure: 6. 4 Effect of the economy on the goal of higher education

6.3.2.5 Rules and Regulations Factor

Among the five external factors, the researcher concluded that the regulatory factor is more important to the existence of private HEIs than public ones, as the latter are more secure and protected by the government. For that reason, the parents and students prefer public HEIs. Higher education primary beneficiaries agree that the rules and regulations affect the HEIs more than the students and that there is a clear lack of understanding of these rules among both the students and their parents. The HEI administrators believe that the rules need to be revisited to serve the goal of higher education.

The students believe that the regulatory factor is more relevant to the HEIs than to themselves. This was evident from their comments regarding the significance of this factor and its sub-factors. Participant (Po6) said:

“For me, a student, I think the rules and regulation for higher education is there more to protect my rights and that the HEIs are more affected by these rules than me. Increasing the HEI tuition fees will not have a significant impact on the enrolment and completion of higher education because my parents, for example, are willing to invest in my higher education, even if it costs more”.

Another student (P06) clearly indicated her lack of awareness of the rules and regulations governing the higher education sector in Bahrain.

“I am unaware of the rules and regulations concerning higher education in Bahrain and therefore cannot see any role for them in shaping higher education’s goal in Bahrain. I believe that the HEIs’ tuition and financial policies play an important role in the rate of enrolment in and competition for higher education”.

The parents, on the other hand, indicated that the government is making insufficient efforts to clarify the rules and regulation concerning higher education and, consequently, is not playing the role it should in shaping the goal of higher education in Bahrain.

“I think that the rules and regulations must be clear to universities to help them to shape their goal and, at the same time, I believe that these rules must protect the students. Regarding public higher education, enrolment at HEIs is encouraged but for a hidden purpose, which is to delay the increase in the unemployment rate in Bahrain. On the other hand, private HEIs face difficulties in attracting student due to their high tuition fees and lack of programmes required for the future” (P10).

On the other hand, the HEI administrators are the most aware of the regulatory role in shaping the goal of higher education in Bahrain, with some reservations about the regulatory bodies the impose these rules and regulations. Participant (FG2-3) said:

“The rules and regulations affect the higher education institutions more than the students. The rules and regulations of higher education need to be revisited due to the global changes and increased competition. I think that our financial policies encourage students to enrol and complete higher education, but I think, in the future, the mind-set must change, as nothing will be free”.

Since the regulation factor is the most unclear of all the other factors, the participants found it difficult to decide on the importance of the rules and regulations on shaping the goal of higher education in Bahrain. The following

diagram shows how each regulatory body shapes the goal of higher education, based on the participants' responses. Figure 6.5 below illustrates how the rules and regulation shape higher education's goal in Bahrain.

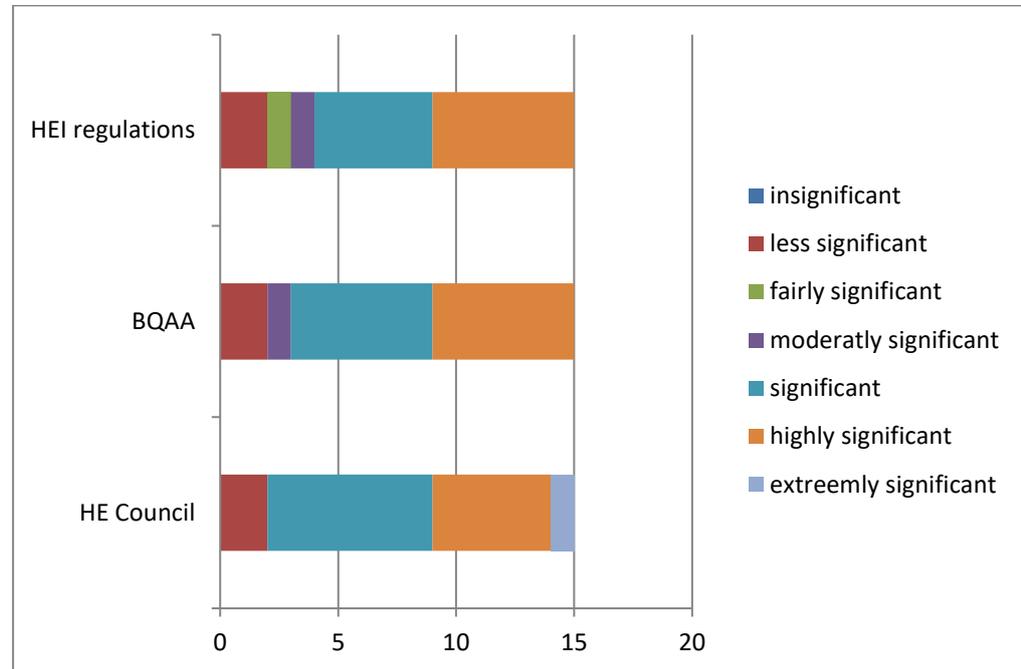


Figure: 6. 5 Regulations affecting higher education's goal

6.3.3 The influence of goal on the attributes of HEIs

The third theme of the case study findings addresses the influence of higher education's goal on the attributes of the HEIs. The researcher explored the views and perspectives of the higher education students, parents and HEI administrators to contrast the results and compare them with the revised framework of the study.

6.3.3.1 The defined goal of higher education

The empirical findings revealed that higher education's goal in Bahrain are politically-defined but, as with importance, structure, and evaluation, there is a gap between the understanding of this goal among the students, parents, and HEI administrators. Participant (P05) stated that he has no idea about any published goal, but that they must be tied to the Bahrain 2030 economic vision, about which he knows only its name. Similarly, participant (P06) stated:

"Unfortunately, I have no idea about a published goal for higher education in Bahrain set by the state or the Ministry of Education", while participant (P07) added: "I have no idea about any defined goal for higher education in Bahrain but, from my point of view, I think that higher education must contribute to economic growth in Bahrain".

Participant (P08) also declared that she has no idea about any defined goal for higher education in Bahrain, so she developed her own goal, which was to create knowledgeable individuals, capable of developing themselves and their standards. Participant (P10) clearly stated that he never had read about or seen a defined published goal for higher education in Bahrain. The empirical findings show that a gap exists between what the country publishes and defines as a goal of higher education and what the student knew or had been informed about.

The parents were in a similar position. Higher education's goal was mostly absent from their agenda and not considered when making choices regarding higher education. Participant (P12) stated:

"I don't have a clear picture of the goal set by the country for higher education".

Participant (P13) similarly commented:

"I think there must be a goal for higher education in Bahrain, but I am unaware of it".

Participant (P11) had another view of the topic, as she mentioned the goal, noting that, after the opening of private HEIs in Bahrain, she can say that the goal of higher education in Bahrain became more business-oriented and focused more on profit than on developing the individual and society.

The HEI administrators, meanwhile, were more knowledgeable about the defined higher education goal, and had a far clearer picture of it than did the students and parents. Participant (FG2-4) commented:

The vision of the Crown Prince fosters higher education as part of development. I believe that the main factor for economic development and the main factor for human development are education and higher education. The original vision for developing higher education in

Bahrain was to develop vocational training, but unfortunately the approach to achieving this vision was incorrect".

Participant (FG2-1) noted that, although he is an active administrator in a public HEI, he cannot say that he knows a defined, published goal for higher education, as this has not been published, although it might feature in the literature issued by the Higher Education Council. He thinks that the goal of higher education should be to improve the quality of individuals.

The above shows that even the HEI administrators have difficulty defining the published higher education goal. The researcher thinks that it is the authorities' role to ensure that the defined goal of higher education is well disseminated among all concerned beneficiaries.

6.3.3.2 The alignment of the policies with the goal

This section is closely related to the preceding one. Here, the researcher considers how higher education's goal is aligned to government policies concerning higher education. The empirical findings revealed a lack of trust in the alignment of the policies implemented with the defined goal. Participant (P05) stated:

"I don't think that the current policies are aligned with or support the published defined goal of higher education in Bahrain". Participant (P07) agreed, and said: *"According to my knowledge, I don't think that the current policies are helping to achieve the goal of higher education in Bahrain".*

This lack of trust is also visible in the stance of the parents when asked about the alignment of the current policies with the defined higher education goal.

Participant (P11) highlighted the transparency issue, and said:

"Based on the goal I mentioned above, I think that there are policies and behaviours that help higher education in Bahrain to be a lucrative business, but not in a legal way".

Participant (P12), meanwhile, declared that he does not believe that the current policies and regulations concerning higher education support the goal of higher education.

This time, the issue of a lack of trust also applies to the HEI administrators, who expressed their concerns that the policies are not very well aligned with the defined goal. Participant (FG2-2) stated:

"As far as policies are concerned, I believe that we have the best written policies available, but the problem lies in the execution of those policies".

Participant (FG2-3) agreed and stated:

"We don't have any problems with policies; our main issue is with implementation of the policies".

Participant (FG2-4) noted:

"The policies must serve the general goal of higher education. The problem is with the private HEIs because their goal is business-oriented and unrelated to the state's defined goal of higher education".

From the above, it is difficult to align the current policies with the defined goal, because the defined goal is imported from another environment and the policies fail to consider the local influential factors mentioned in the second theme.

6.3.3.3 The role of HEIs in fulfilling the goal of higher education

Regarding the role of the public HEIs in fulfilling higher education's goal, the researcher found that there are some positive signs of potential success achieved by the public HEIs in Bahrain, which sends an assurance to the concerned beneficiaries that these HEIs are functioning correctly. Participant (P05) touched on the financial policies of public HEIs, and said:

"The current financial policies of the public higher education institutions are strongly motivating students to join HEIs".

Participant (P06) agreed that the financial policies of the state promote the joining higher education, especially the public HEIs.

Overall, there exists agreement among the students that the financial policies motivate individuals to join higher education, especially public HEIs, thereby making the competition almost impossible to join private HEIs.

The parents also agreed that higher education's role is positive in fulfilling the goal of higher education in Bahrain. Participant (P11) noted:

"As far as the public HEIs are concerned, I think that the financial policies of the state affect positively joining higher education, especially given the affordable fees and good infrastructure".

Participant (P13) viewed this issue from another angle, and said:

"I believe that the financial policies of the public higher education institutions are making it easy for people to join higher education but, at the same time, increasing the cost of higher education for the country, since it is subsidized".

The statement above shows that the state is investing heavily in higher education through funding the HEIs, which in turn makes enrolment easier and more feasible. The HEI administrators' views on this topic agreed with those of the other beneficiaries, although that does not mean that the former fully agree with the policies. Participant (FG2-1) noted that the policies sometimes hinder the development of higher education due to the inconsistency within the regulations governing the higher education sector in Bahrain.

Feasible financial policies, with all their advantages, are causing a visible problem in the public HEIs, as highlighted by participant (FG2-4), who said

"The fees for public higher education are very low compared to private education and that is why we see that the public HEIs are overcrowded compared to the private HEIs in Bahrain".

The researcher concluded that the state is doing its best financially to facilitate enrolment in higher education, but without considering the consequences or effects of such generous policies regarding both accepting students and covering fees, resulting in over-crowded public HEIs.

6.3.3.4 The Effect of the Environment on Higher Education's Goal

This section will explore empirically whether higher education's goal has been shaped according to the external environment factors discussed under theme two. The researcher put a direct question to the participants regarding whether they believed that the decision-makers and policies planners had considered the

factors of demography, infrastructure, culture, economy and regulations when shaping the goal of higher education in Bahrain.

The higher education students in general believe that higher education's goal was not shaped based on the environment. Participant (P05) said:

"I really don't know, but I believe that most goal were brought from abroad and not necessarily analysed according to the environment".

Participant (P06) agreed, and noted:

"I don't think that the external environmental factors were all taken into consideration when defining the goal of higher education for Bahrain".

Participant (P07) shared this view and argued that she does not believe that the goal of higher education in Bahrain were shaped based on its unique environment.

The parents held a similar view on the topic and believed that local environment factors were not considered when shaping higher education's goal. Participant (P11) stated:

"I believe that, to some extent, the environmental factors were not taken into consideration when defining the goal of higher education and, to confirm my opinion, you can see that some graduates were unable to find a job due to market saturation".

On the contrary, participant (P12) argues that that the external environmental factors were considered when shaping the goal of higher education in Bahrain.

Generally, the parents cannot see the effect of the environment on goal-shaping. Participant (P13) stated that she cannot see the effect of the external environmental factors on shaping the goal of higher education in Bahrain as most higher education initiatives are imported from other countries with a different environment.

Moving to the views on this topic expressed by the HEI administrators, these were largely in line with those of the other beneficiaries. Participant (FG2-1) noted that the external factors were relatively considered when shaping the goal

of higher education, but (FG2-2) disagreed, highlighting that the goal was shaped more by the ready-made models applied outside Bahrain, which is why a gap exists between the models and the local environment. In addition to that, Bahrain has a very limited market compared to Saudi Arabia, for example, so the goal should be shaped based on the size, available resources, or decision to globalize the workforce (i.e. prepare them to work anywhere in the world).

Finally, participant (FG2-4) emphasised the ready-made model idea, and said:

"If you go back to the establishment of higher education, the goal was based on an outside initiative that didn't have the full picture of Bahrain's environment and problems. Not all of the local external factors were taken in consideration".

From the above, the researcher concluded that most of the beneficiaries agree that the local environment was insufficiently considered when shaping higher education's goal, but instead the goal was imported through overseas initiatives that were effective in other countries.

6.3.4 The relationship between the attributes and benefits of higher education

This section addresses the theme concerning the connection between the attributes and benefits of higher education. This is carried out through three aspects: the effect of goal on attributes; the attributes of successful HEIs'; and how beneficiaries prioritise the attributes of HEIs.

6.3.4.1 The effects of goal on attributes

The students believe that goal must affect attributes, but this is not the case for Bahrain's higher education. Participant (P07) clearly indicated that the goal of higher education in Bahrain did not shape the attributes of HEIs simply because the HEIs existed before the goal of higher education was defined. Participant (P08) added:

"Although I think that the goal of higher education in Bahrain should be reflected in the attributes, I cannot see any tangible signs of this reflection in reality".

On the contrary, participant (P10) argued that the attributes of the HEIs are more aligned with market demand than the goal of higher education, and said:

"From my observation of my university, I can tell you that some of the academic programmes are opened and closed based on the demands of the market".

This clearly shows that most students do not see a clear relationship between higher education's goal and the attributes of the HEIs.

Unlike the higher education students, the parents believe that there is a link between higher education's goal and the attributes of the HEIs in Bahrain. Participants (P11, 12, and 13) all believe that the goal of higher education is reflected in the attributes of HEIs more than any time before.

Finally, the views of the HEI administrators were explored to see if they detected a relationship between higher education's goal and the attributes of the HEIs. Participant (FG2-2) said:

"I think the goal of higher education is reflected in the attributes of HEIs from the infrastructure point of view, but not very much from the nontangible side, like entrepreneurship and developing the life skills of graduates".

(FG2-3) highlighted an important point when he noted that, as far as the public HEIs are concerned, their attributes reflect the goal of higher education. On the other hand, the private HEIs do not work to achieve this goal as their main goal is to survive the competition.

6.3.4.2 The attributes of successful HEIs

The attributes of successful HEIs, according to the participants, combine tangible and intangible attributes. Participant (P05) noted that the success of HEIs depend on the infrastructure, the faculty, and the academic programmes, whereas participant (P06) stressed that successful HEIs must take into consideration the diversity of academic programmes and recreational facilities. Participant (P07), on the other hand, highlighted the quality issue, and said:

"The most important attribute is the quality of the academic staff at the university".

Participants (P08 and P09) agreed that academic programmes and qualified academic staff are the most important attributes of successful HEIs.

The parents' views on this topic varied. While participant (P10) noted that among the attributes that make a university successful is the modernity of the academic programmes, a good infrastructure and facilities, (P11) argues that a successful HEI must have a good infrastructure, qualified academic staff, and clear solid rules and regulations. Participant (P12) highlighted an interesting attribute of successful HEIs when he said:

"The one important attribute of a good HEI is that its degree is certified, approved and accredited by other universities".

Participant (P13) named four attributes that an HEI must have in order to be successful: diversity of academic programmes, academic staff, an infrastructure, and administration.

Finally, the HEI administrators' views were fairly like those of the parents and students in defining the attributes that lead to a successful HEI. Participant (FG2-1) agreed that the attributes must include a good infrastructure, high quality academic programmes, and easy access to all students, while participant (FG2-2) asserted that the most important attribute of a successful HEI is the diversity and quality of the academic programmes it offers to students. Moreover, participant (FG2-4) added that, for an HEI to be successful, it must synchronize its goal and programmes. The Second is the quality of the academic staff and students. The third and final one is how the HEI contributes to the community.

6.3.5 Higher Education's Benefits

This section addresses on of the most element of the Mean-end theory that is discussed in the literature. The benefits of higher education were discussed in many previous studies, and this research aims to explore whether these benefits differ from one county to another. The empirical findings below reflect the students, parents, and HEI administrators' views on the most significant benefits of higher education and the main driver for joining higher education.

6.3.5.1 The definition of higher education's benefits

The researcher chose to present the empirical data on this sub-theme in table and graph form to simplify the discussion. Table 6.2 and Figure 6.6 illustrate the significance of higher education's benefits.

Table: 6. 2 Significance of higher education's benefits

Benefit of Higher Education	Not Significant	Less Significant	Fairly Significant	Moderately Significant	Significant	Highly Significant	Extremely Significant
	1	2	3	4	5	6	7
Higher e earnings			1	1	4	8	1
Higher chance of employment			1	1	3	6	4
Increased entrepreneurial skills			2	1	3	7	2
More revenue for the state				2	8	3	2
Better social-economic status					7	8	
Becoming more gender nonbiased		1	2	1	3	8	
Improved lifestyle			2	1	5	5	2
More community contribution awareness			2		5	8	
Reduced unemployment rates		2	3	2	4	4	
Other	<ul style="list-style-type: none"> • Improves the quality of the individual • Provides life skills • Improves the quality of the individual • Motivates students to study more 						

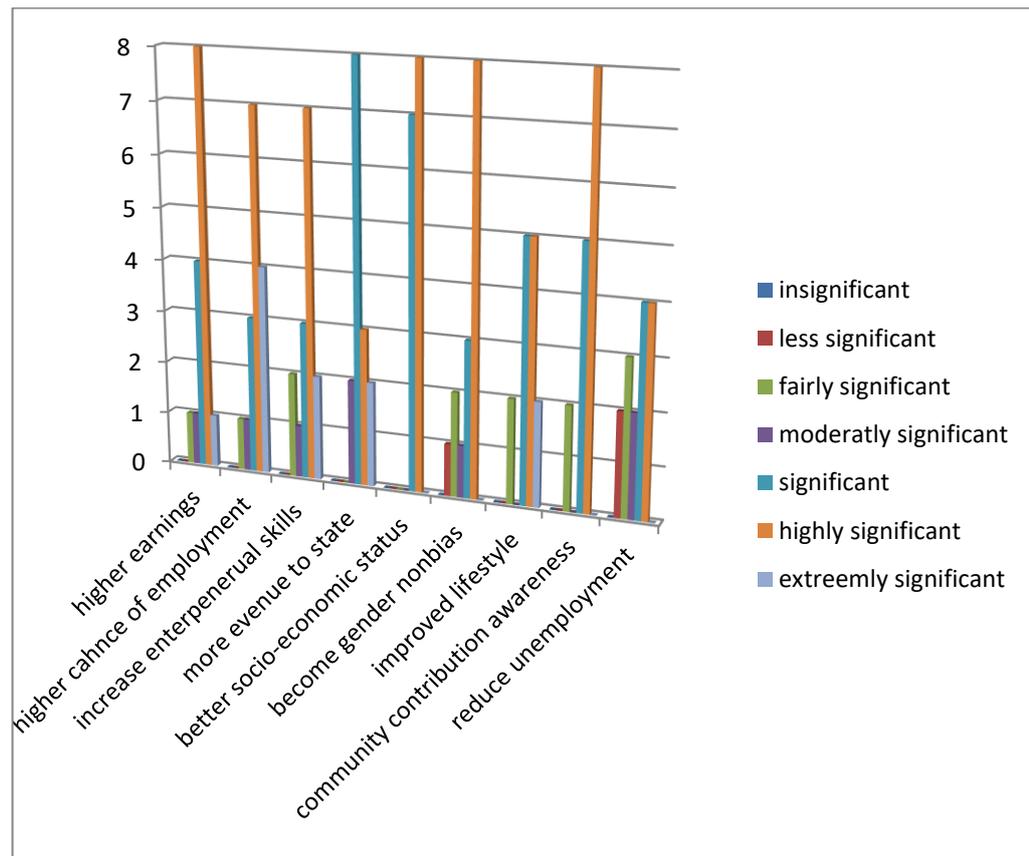


Figure: 6. 6 Significance of the benefits of higher education in Bahrain

6.3.5.2 The main driver for attaining the benefits of higher education

Similarly, the researcher decided to present the empirical data for this sub-theme in table and graph form to simplify the discussion. Table 6.3 and Figure 6.7 illustrate the main drivers of higher education enrolment in Bahrain.

Table: 6. 3 Main drivers of higher education enrolment in Bahrain

Reason for Attending HEIs	Not Significant	Less Significant	Fairly Significant	Moderately Significant	Significant	Highly Significant	Extremely Significant
	1	2	3	4	5	6	7
Study my favorite major	2	1		5	6	1	
Learn and development					2	11	2
Pursue a specific career	1		1		5	4	2
Be intellectually challenged		2	2	4	5	2	
Learn essential life skills	1	3		3	4	3	1
Get a job or find a better one				2	3	3	7
It is a turning point in my life		3		4	4	4	
Make more money		1		2	5	7	
Be more independent and freer	2		2	7	2	2	
Progression after school		1	2	3	4	4	1
Experience university life		3	5	3	4		
Meet new people, make friends	5	3	3	1	3		
I was expected to go to university		5	3		3	2	2
People I know go to university	5	4	1		1	2	2
Other	Some parents push their children to attend higher education for prestige						

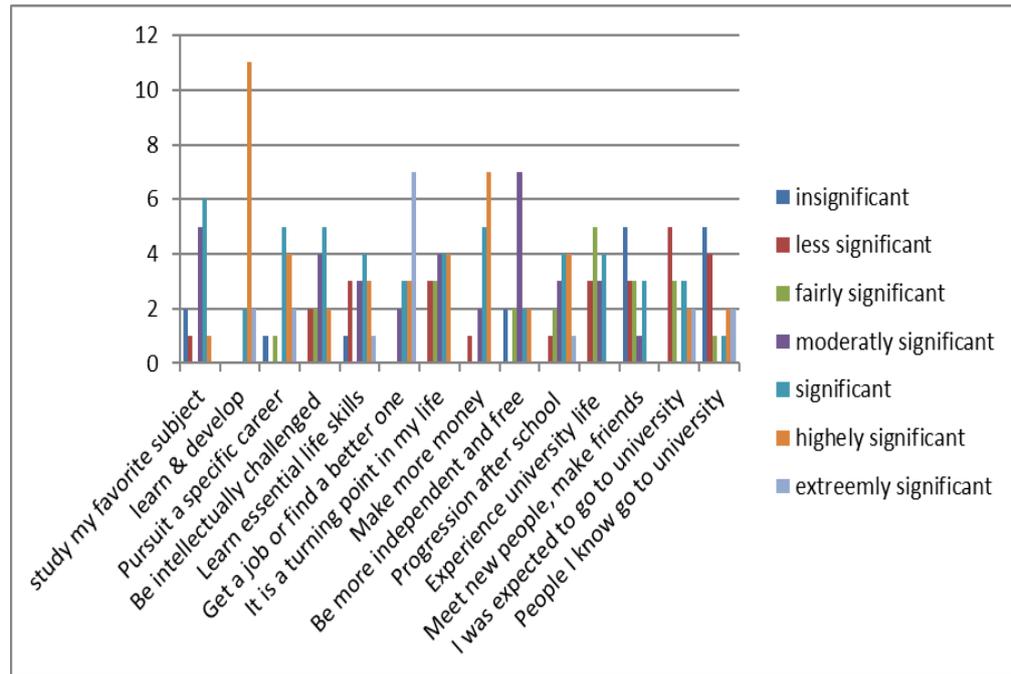


Figure: 6. 7 Main drivers for joining higher education in Bahrain

6.3 Main Study Key Findings

Although the main study institution is four times in population size compared to the pilot study, the findings were very similar in nature. Empirical findings were analysed by NVIVO software which was used to categorise the participants and to code the terminology used. Like pilot study, the data was subdivided in themes related to the research propositions. Software Data analysis helped in organising the data, but not very useful in analysis. The researcher referred to manual analysis to conclude the main study findings which were as follow.

- HEI-Y suffers from overcapacity in most courses as it is obliged to accept any high school student with an average of 70% mark.
- Unlike HEI-X, HEI-Y is more academic oriented and orthodox in the style of teaching and learning.
- HEI-Y is famous for strong graduates and more popular when it comes to employability.

- Like HEI-X students, HEI-Y student and parents think of higher education as a natural progression of high school making them immature when it comes to making decision.
- HEI administrators agree that basic education pre-university needs reform to produce a better input for universities.
- HEI administrators believes that more attention must be given to vocational education to fulfil Bahrain's higher education goal.

To conclude this chapter, the researcher developed a table to compare HEI-X and HEI-Y findings. Table 6.4 below illustrates.

Table 6. 4: Case Studies Comparison

Criteria	HEI-X	HEI-Y
Population Size	32000 approx.	6000 approx.
Funds	Government	Government
Programs	Undergraduate + Postgraduates	Under graduate
Teaching and Learning styles	Orthodox (quizzes and exams)	Problem based learning
Reputation	Considered to be the best HEI in Bahrain	Relatively new
Recognition	Regionally recognised	Locally recognised
Key Findings	Need for local environment consideration to reform higher education goal	Need for basic education reform to achieve higher education goal

6.4 Chapter Summary

This chapter has presented and analysed the findings of an in-depth case study conducted at one of Bahrain's public HEIs. The findings produced by the main case study cover five main themes: the understanding of higher education's importance, structure, and its evaluation. The second theme was the effect of external environmental factors on higher education's goal. The third was the influence of this goal on the attributes of the HEIs. The fourth one addressed the relationship between the attributes and benefits of higher education. Finally, the fifth theme discussed higher education's benefits in Bahrain. All the above

themes were assessed from the perspective of higher education students, the parents of higher education students, and finally the administrators of a public HEI in Bahrain.

The findings of the case study offered the researcher a solid ground and better understanding about the higher education sector in Bahrain, as well as revealing many of the beneficiaries' perspectives concerning higher education. In addition, the researcher in this chapter presented some figures showing the significance of the external environmental factors in shaping higher education's goal. Furthermore, the research presented the significance of certain benefits and attributes of higher education compared to those reviewed in literature. The next chapter will use the findings of the case study to revise and solidify the assessment of the higher education environment framework proposed by the researcher.

CHAPTER SEVEN-DISCUSSION AND REVISED FRAMEWORK

7.1 Introduction

Chapters Five and Six presented the empirical findings of the research along with a discussion of the findings. The findings were in line with the literature reviewed in Chapter Two and the proposed framework presented in Chapter Three. The primary aim of this chapter is to analyse the gap between the developed theoretical framework and how the empirical data influenced the design of the framework and its implantation in the higher education decision-making process. Through empirical findings, the researcher realised that there exists a considerable lack of systematic analysis of how the external environment influences the goal of higher education and a haphazard definition of higher education's benefits and attributes leading to the achievement of this defined goal. It was striking that there exists a huge gap between the different levels of beneficiaries in understanding the goal of higher education as set by the state and the benefits and attributes set by the students and parents alike.

The framework presented in this chapter is a fusion of three well-established tools and models (PESTLE, Means-end theory, and OODA Loop theory) to enable higher education beneficiaries, whether students, parents, or HEI administrators, to assess the external environment of higher education before aligning the goals to the benefits and attributes in order to make them dynamic and relevant in a specific environment. The chapter welds the relevant literature outlined in Chapter Two, the theoretical background discussed in Chapter Three, and the empirical findings of Chapters Five and Six to construct a framework that may serve as a frame of reference to concerned beneficiaries who wish to assess the higher education environment in order to make decisions. The propositions and factors related to the framework are tested against the responses of the pilot study participants as well as the main study participants to examine the feasibility of the proposed framework. Based on the empirical findings, some of the assumptions of the propositions were disproven, or found to be somewhat insignificant, whereas others were strengthened. The outcome

of the integration of the theoretical framework and the empirical findings resulted in a modified framework presented later in this chapter.

7.2 Revised Framework for Higher Education Assessment

The two previous chapters presented the empirical data of the research, to test the conceptual framework developed in Chapter Three. The main idea in conducting empirical study is to identify the factors that support or conflict with the research propositions and answer the main research questions. This allows the researcher to compare the analysed empirical data with a relevant literature critique outlined in Chapter Two. The aim of this section is to offer a broader understanding of how the external environmental factors influence higher education sector for a specific environment through the combined lenses of the theoretical framework and the empirical findings. Figure 7.1 presents the revised conceptual framework for assessing the higher education decision-making process.

The revised framework shown below has many consequences for the results of the thesis but, before discussing these, it is vital to understand how this revised framework has developed from that presented earlier, in Chapter Three. Empirical finding presented in Chapters Five and Six, had a direct impact on the development of the revised framework shown below. The original framework was theoretically developed based on relevant literature on the topic and on a different environment than that of the case study conducted for this thesis. Clearly, the researcher was expecting some changes to be made to the original framework because, as mentioned earlier, each environment has its unique features which require unique solutions.

The philosophical aim of the researcher was to fit new ideas into an established theoretical developed by theorists. Although the revised framework identifies similar constructs to those presented in the proposed framework, it entails several changes to the nature of the relationships among the constructs as well as the mechanism by which it operates. (Waheed and Kaur, 2014) argue that there are several reasons for revising the conceptual framework, such as the

need to add empirical strength to the theoretical-based framework; the need for a comprehensive model combining both theory and empirical data, and finally new knowledge dimensions that dictate the revision of the conceptual model.

The revised framework came as result of the researcher awareness of some gaps in the mechanism of the framework such as the dynamics of the flow of constructs and the relationships between them. Empirical data showed that there is a gap between concerned higher education beneficiaries in defining their individual goal of higher education as well as the goal of the country. This in turn led to misunderstanding of the reason to enrol in higher education and their selection process for the most suited HEIs and program to study.

The revised framework shown in figure 7.1 below starts with an assessment of the environment of higher education from an external perspective based on a modified managerial assessment tool. Consequently, the influence of these factors is imposed on the relationship between higher education goal, benefits, and attributes whether individually or collectively. In addition, the process is organised in a dynamic pattern through applying the OODA Loop pattern of decision-making.

The result of the revision of the framework will help higher education beneficiaries understand the influential environment and the relationship between higher education goal and its benefits and attributes. The following section will explain how the external factors affect shaping higher education goal and its benefits and attributes.

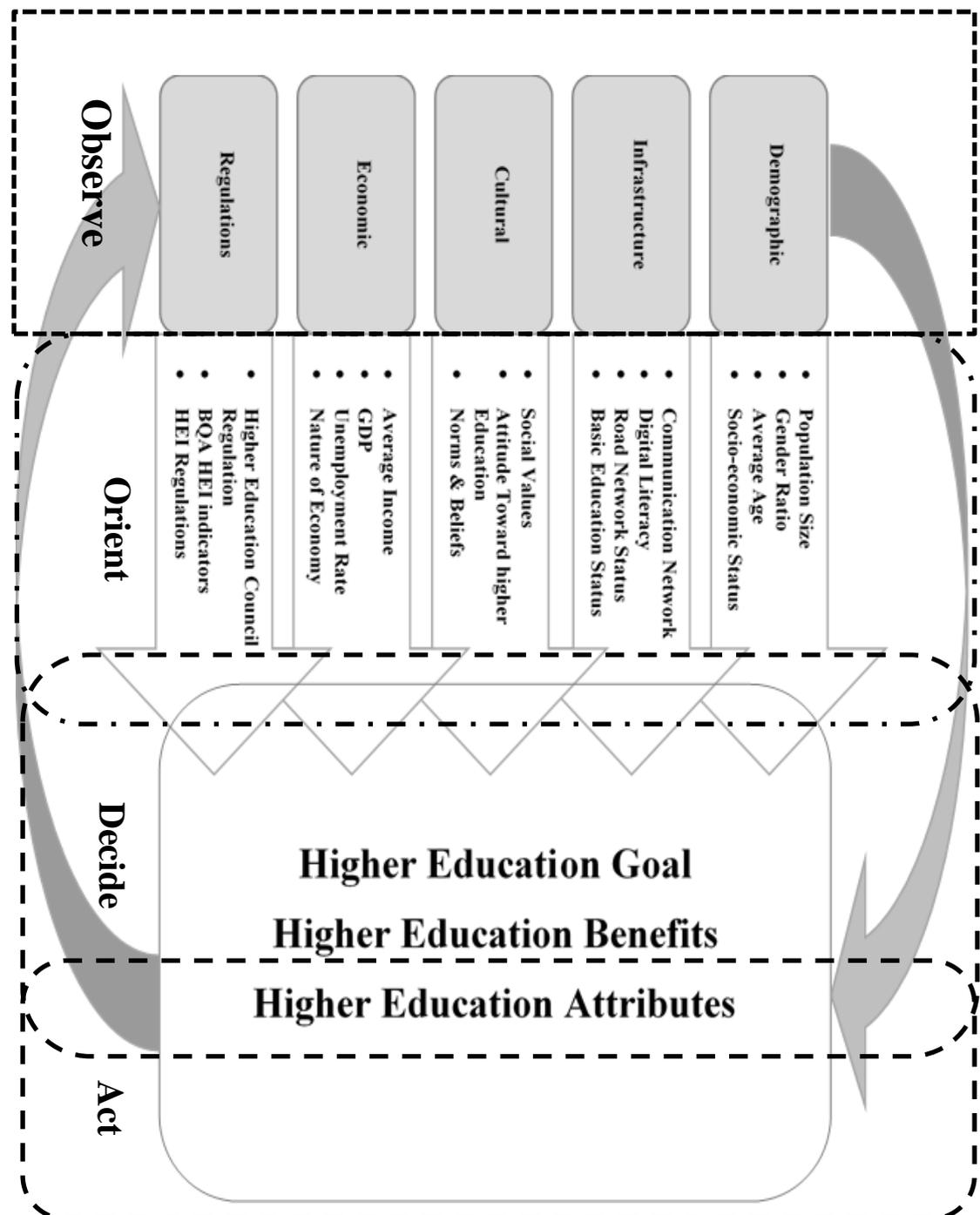


Figure: 7. 1 Revised Higher Education Assessment Framework (DICER)

7.3 The Revised Effect of External Environmental on Higher Education Goals

The external environmental factors influencing higher education have been mentioned in many studies and literature. Some argue that the relationship between higher education and the state, represented by rules and regulations,

has a great effect on the development of HEIs (Olsen, 2007); (Maassen and Stensaker, 2011), whereas others believe that performance measurement plays an important role in the higher education sector (Ghosh and Das, 2013).

On the other hand, a policy paper, published by the UK Competition & Market Authority in 2015, argues that easing governmental rules and restrictions on HEIs will drive up the quality and provision of higher education. Other factors influencing higher education were nonradical and nonconventional such as the views of Paxton, (1999), Putnam, (2000), Van Oorschot *et al.*, (2006) who pointed out that social capital (social networks, social trust, social norms, and institutional trust) influence higher education choices and preferences from an environmental perspective.

However, this research focuses more on the traditional external factors influencing the higher education sector, based on the modified PESTLE analysis model, named by author as DICER, that includes demography, infrastructure, culture, economy, and regulations. The following sections will illustrate the difference between the theoretical framework and the revised version shown above, based on the empirical findings of this research.

7.3.1 Demographic Factor

The research identified the influence of the demographic factor in shaping higher education's goal and the decision-making regarding higher education. The empirical findings showed that every society has its unique demographic features and that each element of the demographic factor has a specific significance, depending on the society. For that purpose, the researcher will compare the importance of each element according to what the literature review revealed and what the empirical study showed.

Table: 7. 1 Demographic effect on higher education

Demographic Factor	Significance in the Literature Klemencic and Fried, (2015) Vincent-Lancrin, (2017)	Significance in the Findings
Population Size	High	High
Gender Ratio	Moderate	Moderate
Average Age of Population	High	High
Socio-economic Status	High	High
Ethnicity	High	low

From the table above, the researcher concluded that the demographic element influences higher education in Bahrain with the same degree of significance in general, but the researcher also noted that the ethnicity element barely affects higher education policymaking, unlike what the literature revealed, possibly due to religious beliefs. According to Klemencic and Fried, (2015) higher education influenced demographic factors declining birth rates in Asia. Similarly, the researcher noted the same effect on birth-rates as parents tend to have less children to afford better education for them.

Another aspect where higher education is related to demography is mentioned by Vincent-Lancrin, (2017) who noted that demographic trends in a country's population or worldwide may have an impact on the size, cost, dynamics, and demographics of higher education systems and their outputs. moreover, higher education systems have their own demographic trends: one can for example be interested in the size, composition, and dynamics of student, graduate, academic, and administrative staff populations within the sector for a variety of reasons. Finally, higher education has an impact on countries' demographics: not only is educational attainment one of the criteria that is often studied in demographic studies, but the share of the tertiary educated group in a population can also have an impact on countries demographic trends as this influences birth and mortality rates, health, income, etc.

The researcher concluded that if higher education influences demography then the opposite is also true and that was visible from the empirical data collected as primary beneficiaries highlighted some significant influence of demography on higher education such as average age of population which highly affected the size of higher education sector in a country.

7.3.2 Infrastructure Factor

Infrastructure was the second factor to assess in this study to explore its significance in shaping higher education's goal. Literature on the same category of country (Developing Countries) showed that certain elements, such as communication networks, digital literacy, road network status, and basic education, have a significant effect on higher education. The empirical findings, on the other hand, showed that, although Bahrain is a developing country, it is in a better position compared to other developing countries.

In an empirical study by Devine *et al.*, (2016), the authors stressed that the implementation of advanced technology infrastructure of universities is significantly important to the success of higher education institutions. In addition, they claim that human capital plays an important role in the development of any university. Similarly, empirical data of this research strongly suggest that the human capital of the university is equally important to its tangible infrastructure.

Another aspect of infrastructure is digital literacy. A study by Lea and Johns, (2011) asserts that higher education students with higher digital literacy and better technological capabilities perform better in universities and more likely to succeeded in their career. Empirical data of this research agrees with the results of the above-mentioned study and shows that digital literacy has a high significance on higher education outcomes.

Table: 7. 2 Infrastructure's effect on higher education

Infrastructure Factor	Significance in the Literature <i>Devine et al., (2016)</i>	Significance in the Findings
Communication Network	High	High
Digital Literacy	High	High
Road Network Status	High	Moderate
Basic Education Status	High	High

Form the above, it appears that basic education is the most significant element in the nontangible infrastructure factor influencing higher education in Bahrain. The empirical findings stressed that, for higher education to develop, more attention must be paid to basic education reform.

7.3.3 Cultural Factor

This was the factor that surprised the researcher the most regarding the high level of awareness among the participants. Although Bahraini society is believed to be conservative and closed, the empirical findings showed its higher education sector is open and welcoming, with few reservations and no issues related to factors such as mixed gender education and norms and beliefs. In fact, the cultural factor influenced positively enrolment and participation in higher education. The findings cemented the idea that the attitude toward higher education's importance is a global trend that is growing and developing.

Table: 7. 3 Cultural factor's effect on higher education

Cultural Factor	Significance in the Literature <i>Stafford and Galle (1984)</i>	Significance in the Findings
Social Values	High	High
Attitude Toward Higher Education	High	High
Norms and Beliefs	Moderate	low

The extant literature such as Stafford and Galle (1984) who argued that the cultural factor is strongly related to the economic factor. The empirical findings agreed with the literature reviewed and added that attitude toward higher education is directly influenced by the average income and socio-economic status of the parents of higher education students. In addition, the empirical findings showed that norms and beliefs are diminishing in importance regarding the higher education choice and decision-making process.

7.3.4 Economic Factor

As mentioned above, the economic factor is significantly related to the cultural factor in influencing higher education choice and decision-making. Moreover, the economic factor is considered a global motivator for beneficiaries at all levels to invest in higher education. Researchers such as Stafford and Galle, (1984) have asserted that economic status highly influenced higher education choice. The empirical findings agreed and showed that economic growth is the main motivator for investing in higher education.

Overall, and according to the scholars' insights, who believe that higher education has a great impact on the economy (Christie *et al.*, 2015), the researcher argues that the opposite is true as well as that the economic factor is an important one in shaping the goals of higher education in any country, as it is simply the driving force for life. The nature of the economy in any country dictates the type of programmes and number of higher education graduates. Some countries need more vocational higher education than academic higher education to provide a skilled workforce to nurture the economy.

A better economy means a greater capability to invest in higher education, whether publicly or privately, locally and abroad. From the context, this factor has the least important effect in shaping the goals of higher education, not because it has no effect, but because it is not circulated to or understood by the lower level of beneficiaries. Table 7.4 below shows the difference between the significance in the literature compared to the empirical findings.

Table: 7. 4 Economy's effect on higher education's goal

Economic Factor	Significance in the Literature <i>Christie et al., 2015</i>	Significance in the Findings
Average income	High	Extremely high
GDP of country	High	High
Unemployment rate	High	Moderate
Nature of economy	Not visible	Significant

7.3.5 Rules and Regulations Factor

The rules and regulations governing higher education have a great influence on the higher education sector's development and growth. As mentioned in a discussion paper by Gregory and Lodge, (2015), rules such as academic freedom are important for a healthy higher education environment. Another important rule and regulations aspect mentioned in this paper was the funding of HEIs and how this is regulated.

Although studies and academic papers usually avoid discussing the state regulations on higher education, Black, (2015) asserted that, since higher education is mainly funded and supported by the state (especially the public HEIs), then it is logical that the state will also oversee the higher education rules and regulation. She also noted that states' rules and regulations on higher education vary from one sector to another. For example, they are stricter in health care higher education than in the management fields.

From the empirical findings, the researcher observed that it is mandatory to revisit the extant rules to bring them more into line with the higher education goals in Bahrain. Recently, Bahrain's rules and regulations concerning HEIs have been toughened to protect the reputation of the higher education sector from what are known as commercial HEIs that are more concerned with business than education. Table 7.5 present the differences between the extant literature and the empirical findings regarding the effect of rules and regulations on the higher education sector.

Table: 7. 5 Effect of regulations on higher education’s goal

Regulation Factor	Significance in Literature Black, (2015)	Significance in Findings
Higher Education Council	High	High
Quality Assurance Authority	High	Significant
HEIs’ internal regulations	Moderate	High

7.4 Revised Means-end Theory of Decision-making

7.4.1 Goal of Higher Education

Higher education’s goal or ultimate value is to deliver knowledge (Fitzgerald *et al.*, 2016). From a state's perspective, higher education is expected to contribute to the advancement of any country, making it a stronger, wealthier, and more just nation. The literature stated the goal of higher education is a broad political goal, such as being able to offer extensive access to education post-high school level to generate the workforce required to enhance a developing economy (Fitzgerald and Simon, 2012). It is also important to develop the individual and society (Bonnen, 1998).

The empirical findings, on the other hand, revealed that higher education’s goals are usually set by the state as part of an economic vision to achieve economic growth, but that these goals suffer from two important flaws. The first is the inability of the state to disseminate this goal to the society and individual in a proper, clear manner, making the public repeat what the state is saying without relating this goal to behaviours that lead to its achievement.

The other important flaw is committed by both individuals and the state. As far as the state is concerned, it usually imports canned goals that worked somewhere else, without analysing the environment, whereas individuals, whether students or parents, tend to follow trends and popular programmes that other chose years ago, making this choice the wrong one at the wrong time. The empirical findings also revealed that individuals consider higher education as a natural progression from high school, resulting in higher education students retaining a high school mentality.

With the increased competition within the higher education sector, the HEIs may find themselves obliged to alter their goal in order to survive. (Fitzgerald *et al.*, 2012) noted that HEIs are faced with collective challenges, including political, social, and economic ones that may force them to reduce the broad access to higher education through reducing staff, combining programmes, increasing tuition fees, and focusing energy on legislative programmes.

Table 7.6 below summarises the differences between higher education's goal, drawn from the literature, and the empirical perspective. The broad goal of higher education globally is to contribute to a country's economy, but this is difficult to achieve.

Table: 7. 6 Higher education's goals comparison

Higher Education's Goals	Literature Findings (Fitzgerald <i>et al.</i> , 2012)	Empirical Findings
Students' goal	<ul style="list-style-type: none"> Unobserved at this level as it is aligned to the political goal defined by the state. 	<ul style="list-style-type: none"> Improve chance of getting a job with a better income.
Parents' goal	<ul style="list-style-type: none"> Aligned with the political goal identified by the HEI administrators. 	<ul style="list-style-type: none"> Delay the unemployment problem. Create a better future life for their children.
HEI administrators' goal	<ul style="list-style-type: none"> Provide ready access to higher education. Serve as cultural, technical, and economic hothouses for the state. Establish the reputation of the larger community and act as a resource magnet. 	<ul style="list-style-type: none"> Contribute to the state's strategy of economic growth. Provide easy access to higher education Improve the image of the society.

7.4.2 Benefits of Higher Education

Unlike higher education's goals, the benefits of higher education are extensively discussed in the academic research, especially at the individual and micro levels, but its macro level benefits are less discussed and more widely debated (Hermannsson *et al.*, 2017). The literature categorized the benefits of higher education into four major categories: the private market, non-private market, external market benefits, and external non-market benefits.

Private market benefits are those enjoyed by individuals who hold a higher degree. They are usually better paid and less likely to be unemployed. The second type refers to the benefits offered to individuals outside the market, such as the positive returns on health, longevity, and happiness (McMahon, 2009). However, the external market benefits are those offered to society in the form of higher salaries and increased GDP. Finally, the external nonmarket benefits of higher education are more intangible for society but manifested by quality of life improvement. According to (Machin and Mc Nally, 2007), these four types of benefits continue to be enjoyed and flourish, making higher education an ongoing lucrative business.

A previous empirical study conducted by (Hermansson *et al.*, 2014) estimated that private market benefits contribute 3.7% of regional GDP in the long term. This suggests that the non-market benefits may contribute up to 4.5% of UK GDP in the long term. Such benefits motivate both individuals and states to invest heavily in higher education. The current research cemented this idea through the interviews, as it was clear that the main foreseeable benefits of higher education are economic-based, whether on the individual or societal level.

Figure 7.2 below, presented by Brennan *et al.*, (2013) illustrates the four quadrants of higher education's benefits. Some of the benefits mentioned were clearly observed in the empirical findings of this thesis, while others were not, due to the impact of the external environment and the nature of society.

<p>Society non-market benefits</p> <ul style="list-style-type: none"> • Greater social cohesion • Higher levels of tolerance (e.g. toward migrants) • Lower propensity to commit crime • Political stability • Greater social mobility • Social capital 	<p>Society market benefits</p> <ul style="list-style-type: none"> • Increased tax revenue • Faster economic growth • Greater labour market flexibility • Increased productivity of co-workers • Reduced burden on public finances due to better co-ordination between HE policy and other social policy areas, such as health and crime prevention
<p>Individual non-market benefits</p> <ul style="list-style-type: none"> • Greater propensity to vote • Better chance to volunteer • Greater propensity to trust and tolerate others • Lower propensity to commit (non-violent) crime • Longer life expectancy • Less likely to engage in unhealthy behaviour • More likely to engage in preventative care/healthy behaviour • Less likelihood of obesity • More likely to cope with distress 	<p>Individual market benefits</p> <ul style="list-style-type: none"> • Less exposure to unemployment • Higher earnings • Increased productivity

Figure: 7. 2 The benefits of higher education according to (Brennan *et al.*, 2013)

Like the figure shown above, the empirical findings of this research showed that there are four major benefits of higher education that were particularly stressed during the interviews. In addition, the researcher could also categorize these benefits into two major categories: individual and societal. The first benefit is higher earnings, as most of the participants stressed that higher education will lead to higher earnings. The second benefit is improved social-economic status, which means that higher education graduates enjoy more respect from society. The third benefit is that higher education raised the awareness of community contribution. The last major benefit is that it helped students become less gender-biased. On that basis, the researcher believes that benefits mentioned by Brennan *et al.*, (2013) could be used as a generic benefit of higher education both on individual and societal level.

Table 7.7 below summarizes the similarities and differences between the benefits of higher education from the literature and empirical findings

perspectives. The researcher strongly believes that this section reveals that the economic benefits of higher education, both on the individual and state level, are the most important benefit of higher education.

Table: 7. 7 Higher education’s benefits comparison

Higher education benefits	Literature Findings Brennan <i>et al.</i> , (2013)	Empirical Findings Case study
Students’ benefits	<ul style="list-style-type: none"> • Citizenship • Civic engagement • Lower rate of crime • Better health condition • Improved wellbeing 	<ul style="list-style-type: none"> • Higher salaries • Higher chance of employment • Better entrepreneur skills •
Parents' benefits	<ul style="list-style-type: none"> • Provide contentment and happiness • Achieve a better socio-economic status 	<ul style="list-style-type: none"> • Better socio-economic status
HEI administrators' benefits	<ul style="list-style-type: none"> • Research and knowledge spread • Increased enrollment rate • Achieves social capital 	<ul style="list-style-type: none"> • Better social capital

7.4.3 The Attributes of the HEIs

The attributes of HEIs were discussed in many studies and academic papers, but mostly from a service quality aspect. (Woodall *et al.*, 2014) divided higher education’s attributes into five main categories: lifestyle facilitators (local shops, cafes, transport links, accommodation, etc.), academic support (library, language programmes, internet access, teaching staff, etc.), career enhancers (university jobs, career offices, etc.), support services (health centres, counselling, financial advice, student unions, etc.), and finally lifestyle enhancers (gyms, cultural centres, sport teams, etc.). From the above, the higher education primary beneficiaries consider attributes as the tangible characteristics of the HEIs.

On the other hand, academics such as Leong and Kavanagh, (2008), who presents the attributes or characteristics of higher education from an intangible aspect, that includes openness (availability to everyone of all ages), continuity

(emphasising linkages between various educational activities), integration (the inclusion of all education activities), flexibility (regarding time, place, and type), and appropriateness (relevance to life and work career).

From the above, the researcher concluded that attributes must include both aspects to facilitate the decision-making process when selecting the most suitable HEIs. With all that in mind, the empirical findings revealed that the beneficiaries view attributes from three different aspects. The first aspect is the students' aspect, who look for more tangible attributes like those mentioned by (Woodall, 2014), such as parking places, cafes, gyms, shops, and other lifestyle facilitators. The second aspect was more observed by the HEI administrators, who regard attributes as a triangular relationship between students, academic staff, and programmes. The third and final aspect is seen by the parents, who think more of (Leong, 2008) attributes in addition to financial feasibility.

Table 7.8 below presents the differences between higher education's attributes found in the literature and the empirical findings, respectively, which can be summarized as semi-identical, with different views of different beneficiaries.

Table: 7. 8 Higher education's attributes comparison

Higher education attributes	Literature	Empirical Findings
Students' attributes	Tangible, related to support and facilitators	Tangible, related to securing a job mainly
Parents' attributes	Combination of both tangible and intangible attributes	More oriented toward job security and financial attributes
HEI administrators' attributes	Both tangible and intangible attributes	More intangible attributes

7.5 Revised Nature of the Means-end Theory of Decision-making

The reviewed literature highlighted the laddering and hierarchical nature of Means-end theory, where attributes lead to benefits which, in turn, lead to goals or values. The literature also revealed that this hierarchical system depends on

the level of the higher education primary beneficiary under study. On the contrary, the researcher proposes a relatively dynamic flow, where goals, benefits, and attributes form the links in a continuous chain.

7.5.1 The dynamic nature of Means-end Theory

Researchers such as (Heinze *et al.*, 2017) stress the three hierarchical levels of the model, starting with attributes, benefits, and goals. Means-end Theory, according to academics, is based on an intellectual view that presumes that human experience and other types of information are linked in a hierarchical manner (Grunert and Grunert, 1995). In addition, Means-end Theory replicates the selection of the relationship between attributes, benefits, and goals. The linkages emerge from experience, during which consumers develop specific associations between product or service attribute and the potential benefits that may be derived from the achievement of the intended goals (Reynolds & Gutman, 1988).

Furthermore, (Barrena *et al.*, 2017) added that emotions, defined as a foundation mind-set resulting from cognitive patterns learned from events or thoughts, usually accompanied by a psychological process and manifested physically, influence the relationship between attributes, benefits, and goals, but again in a hierarchical order.

Similarly, (Jeng and Yeh, 2016) view Means-end Theory as a hierarchical relationship, starting with attributes then leading to benefits to achieve the desired goal. They claim that using attributes as a method refers to the characteristics of a service or product supposed by consumers (Reynolds *et al.*, 2001), including tangible and intangible, whereas benefits reflect the direct or indirect effects on consumers after the service or product is consumed. These benefits lead to the most important part of the theory, which is the desired goal.

On the other hand, this research presents a new concept, in which the goal comes first when a decision is to be made, as it is the most important element in the decision-making process so, consequently, the benefits are assessed before the attributes of higher education are defined, as is the case in this thesis. The

researcher argues that this reverse approach helps beneficiaries to make sound, clear decision based on a predefined goal that is aligned across the spectrum of beneficiaries.

7.5.2 The OODA Loop Effect

The integration of the OODA Loop appeared to be a natural extension of Means-end theory, as demonstrated in the previous section. Several academics and scholars have adopted the OODA Loop in the fields of business and management to cope with the fast-changing environment. (Punia *et al.*, 2014) integrated the OODA loop into software development, and argued that it is a tool for effective risk management. Each step helps the managers to identify, track and manage risks. Owing to the cyclic nature of the OODA loop, multiple iterations can be applied to the project as risks evolve over time. The successful implementation of the OODA loop helps project managers to complete their projects within budget and on time.

Likewise, the researcher believes that OODA Loop integration into the decision-making framework for the assessment of higher education policies in the future will constitute a positive advance. The researcher aims to test its effectiveness over the course of the higher education decision-making process. Each identified phase of the loop will be tracked, and all observations, decisions and actions will be recorded to ensure that a fast, accurate decision is made.

7.6 Chapter Summary

Chapter 7 presented and discussed the empirical findings of both the pilot and main case studies that aimed to assess the external higher education environment factors influencing Bahrain's higher education goal and policymaking. The primary aim was to revise the framework through revisiting its constructs and interrelationships. The revised framework is presented in this chapter. The main conclusions elicited from these findings from an assessment of the external environment factors of the higher education sector in Bahrain are: the assessment of external factors developed by the researcher, that shape the goals of the higher education sector, the relationship between the End-means

theory constructs (goals, benefits, and attributes), and, finally, the effect of the dynamic nature of OODA Loop Theory on the End-means Theory of decision-making.

The revised framework presented in this chapter alters the influence of the external environment, promote some of the factors, and demote others that were originally identified in Chapter Three. The revisions mainly consider the scope of influence of the external environment factors on the constructs of Means-end Theory, the relationship between the elements of the decision theory, and finally the nature of the framework. The revision of the conceptual framework was based on the results of the empirical findings of both the pilot and case studies conducted for this research, that were presented and discussed in Chapters Five and Six respectively.

The one-to-one, in-depth interview and focus groups outcomes produced three main findings, based on which the researcher decided to revise the conceptual framework. First, the researcher found that, although the external factors shaped higher education's goal, they also had a direct influence on the benefits and attributes of higher education. This convinced the researcher that the external environment influences the whole of the Means-end Theory decision-making model, not only the goals. The second revision related to the degree of impact of these external factors, as they differ from one environment to another and with different magnitude. This suggested that the external factors might be subject to further testing and measurement, using a quantitative tool, for example.

The last revision suggests that adopting a dynamic nature like that found in the OODA Loop would enhance the performance of the framework when implemented to assess higher education decision-making and determine the alignment of the attributes to the benefits and goals. The researcher strongly believes that a dynamic process involving the assessment of the external environment and the Means-end Theory of decision-making will better serve the concerned beneficiaries, whether they be students, parents, or HEI administrators. Overall, the empirical findings support the research conjectures

and the factors derived from the existing literature, which gives the proposed framework a degree of robustness. Having said that, it should be noted that the framework never intended to evaluate any existing policy, or a decision taken by any beneficiary, but merely to identify where these policies/decisions were misaligned with the defined higher education goal of Bahrain, which was the context for the research.

CHAPTER EIGHT-CONCLUSION AND CONTRIBUTION

8.1 Introduction

Higher education is becoming of increasing interest to individuals and government alike, for different reasons. This research emphasises that higher education is no longer the preserve of the elite, but a necessity for individual development and national economic growth. This research assessed the literature on higher education's importance and revealed a gap between higher education primary beneficiaries' (students, parents, and higher education institutions administrators) perspectives of its importance, goal, and benefits. Therefore, this thesis addressed this void in the literature by presenting and articulating a holistic model for assessing higher education policymaking from a strategic management perspective.

In addition, the researcher concluded that the gap between primary beneficiaries is a result of unawareness of some beneficiaries of published defined higher education goal and how it relates to individual goals. Consequently, there is also a lack of understanding from beneficiaries about the importance of higher education and its potential benefits.

The framework combines a well-established decision theory (i.e. Means-end Theory) and the influential external environmental factors (i.e. demographics, infrastructure, culture, economics, and regulations) to aid higher education strategic decision-makers to shape the goal of higher education, define its attributes, and attain its benefits. The intention was to construct a framework and frame of reference that would support decision-makers in making the right choices when electing a suitable goal and defining the correct attributes for a specific environment. This research contributes, at both the theoretical and empirical level, toward an enhanced understanding of the importance of designing a custom fit policy regarding higher education policy- and decision-making, at both the individual and collective level.

This concluding chapter begins by presenting how the research aims and objectives have been met throughout this thesis. Afterwards, the main conclusions drawn from both the literature and empirical research reported in the thesis are presented, together with this research's possible limitations. Following this, the research contribution is summarized and, finally, recommendations for further work are proposed.

8.2 Meeting the Research's Aim and Objectives

Achieving the aim of this study required the fulfilment of several objectives, as defined in Chapter One, which affected the literature review framework development, research design and methodology, and the empirical findings that were reported in Chapters Five and Six. These objectives are summarised in Table 7.1 and analysed in the following paragraphs.

Table: 8. 1 Research Objectives' Achievement through the course of the thesis

Objective	Chapter
To explore the effect of external environmental factors on Bahrain's higher education sector.	Chapter Two
To investigate the importance of higher education to primary beneficiaries (students, parents, and higher education administrators).	Chapters Two and Three
To determine whether higher education's benefits for beneficiaries serve Bahrain's higher education goal.	Chapters Two, Three, Five, Six, and seven

Objective 1: To explore the effect of external environmental factors on Bahrain's higher education sector.

Through a critical analysis of the extant literature, several research gaps were observed and further investigated by the researcher. The research presented a holistic literature review of the higher education sector in Bahrain and its importance to Bahrain's economy. In addition, Chapter Two defined the external environmental factors affecting higher education in general and investigated

some of the managerial tools and theories that fostered the development of the conceptual framework of the research.

Objective 2: To investigate the importance of higher education to primary beneficiaries (students, parents, and higher education administrators).

Through the extensive literature review, the researcher developed an understanding of how external environmental factors might influence higher education. By selecting the focal theory of the research, it was possible to identify a relationship between Bahrain's higher education goals and its attributes.

Objective 3: To determine whether higher education's benefits serve Bahrain's higher education goals.

In addition to the literature reviewed in Chapter Two and the development of the conceptual framework in Chapter Three, the researcher observed and noticed, through the empirical data presented in Chapters 5 and 6, how the benefits of higher education are aligned to higher education's goal in Bahrain.

8.3 Research Finding and Evaluation

The research findings, outlined in Chapters Five and Six, are based on two sources. Initially, the literature review presented in Chapter Two resulted in the development of the conceptual framework of the research presented in Chapter Three. The second source is the results of the pilot study and the main case study of two public HEIs in Bahrain. The literature review allowed the researcher to draw a general idea of how the environmental factors might influence the goal of higher education, how these factors are analysed and how the goals, benefits, and attributes are related.

On the other hand, the empirical data presented evidence on how higher education is shaped in Bahrain. The two sources offered a contrasting view to analyse and interpret the findings, allowing conclusions to be drawn from the thesis. The key findings produced by this research are emphasized below:

This research concluded that all the beneficiaries agree that the demographic factor is important in shaping the goals of higher education. Contrary to recent studies (Meena, 2018), most of the beneficiaries believe that there are no issues regarding the gender ratio and ethnicity, as Bahrain is an open country that accepts everyone, regardless of gender or ethnicity. Among the different levels and types of higher education beneficiaries (parents, students, and to some extent HEI administrators) specified in the research, there is a common agreement that the state's higher education goal is not communicated to them clearly and that this goal was not shaped according to the five external factors of the environment.

The findings confirm the finding of recent studies, such as (Jana and Karmakar, 2017), that the infrastructure factor plays an important role in shaping the goals of higher education, so clearly the basic education status must be taken into consideration and developed in alignment with any defined higher education goals. Other considerations are important in facilitating the achievement of the stated goals. Bahrain is a modern country that embraces higher education without major reservations regarding social norms and beliefs. All the beneficiaries understand that higher education is an open society, governed by rules, regulations and people's high awareness of openness and acceptance. Cultural limitations play a minor role when shaping the goals of higher education in Bahrain.

Overall, in line with the scholars who believe that higher education has a great impact on the economy (Kelly and White, 2015), the researcher argues that the opposite is true as well, since the economic factor plays an important role in shaping the goals of higher education in any country, as it is simply the driving force of life. The nature of the economy in any country dictates the type of programmes and number of higher education graduates. Some countries require more vocational higher education programmes than academic ones to ensure that a skilled workforce is produced to serve the economy.

A better economy means a greater capability to invest in higher education, whether publicly or privately, locally or abroad. From the context, this factor has the least important effect in shaping the goals of higher education, not because it has no effect, but because it is neither circulated to nor understood by to lower level of beneficiaries. It is mandatory to revisit the extant rules to bring them into closer alignment with higher education's goal in Bahrain. Recently, Bahrain's rules and regulations concerning HEIs have been toughened to protect the reputation of the higher education sector from what are known as commercial HEIs that focus more on business than education.

Moreover, the empirical findings of the study highlighted some of the main areas where there exists a huge gap between what is planned and implemented, and the views of different beneficiaries regarding the goal of higher education and its attributes and benefits. This research contributes at both a theoretical and empirical level to developing a frame of reference and guide to help decision-makers to make the correct decisions that are most suited to the environment, when evaluating the higher education sector in Bahrain. The study clearly highlighted the following areas:

- The sudden increase in the number of private HEIs at the beginning of the second millennium was not well-planned, did not benefit the higher education sector in Bahrain, and failed to gain the trust of the primary beneficiaries (students and parents).
- There is a clear acetify in the composition and distribution of number of students in both the public and private HEIs in Bahrain, resulting in the inability of HEIs to achieve the state's defined higher education goal.
- There was no or little consideration of the external environment factors when shaping the goal and objectives of the higher education sector in Bahrain.
- There is a lack of higher education policy dissemination among the primary beneficiaries (student and parents), leading to their inability to select the most suitable programmes and HEIs.

- Higher education primary beneficiaries regard higher education as a natural progression from high school, resulting in a higher unemployment rate among higher education graduates.
- The HEI authorities and entities are working in a separate silo pattern, leading to wasted time and effort as well as a lack of integration.

8.4 Research Novelty

One of the aims of any research is to bridge the gap between theory and practice. In this thesis, the researcher utilised established decision-making theories assessment tools developed by academics to construct a framework to be used in higher education field as an aid for concerned beneficiaries when making decisions regarding choice of universities and programs based on a goal-benefits-attributes relationship.

A significant element of any research endeavour is its contribution to the body of knowledge in a specific field or academic community. Based on the above statement and taking in consideration of recent literature, this research mainly contributes by introducing a new element to an established decision theory using a modified strategic analysis tool. A in a recent study by Fitzgerald *et al.*, (2016) highlighted four fundamental characteristics that any higher education must consider to be prepared for the 21st century. First, it must be university-community integrated and able to serve both and the output of this integration must be visible in communities. The second characteristic is it must intersect with the missions of the higher education institution instead of being a separate activity. Third, higher education must be reciprocal and mutually beneficial. Finally, it must hold and contain the values of a civil democracy according to Bringle and Hatcher, (2011).

with the above-mentioned characteristics in mind, the researcher strongly believe that higher education policymaking needs to be customized based on the environment and interests of the concerned beneficiary to achieve the goal, attain the benefits, and define the required attributes connected to higher

education. This research contributes in both theoretical and practical terms, as follows:

8.4.1 Theoretical Contribution

Extant literature discussing the factors influencing higher education such as (Evangelinos and Jones, 2009); (Murdock and Nazrul Hoque, 1999); (Herath *et al.*, 2015); (Staford *et al.*, 1984); (Black, 2015) all emphasised on the effect of environmental factors on high education as a service, but little saw the influence of these factors on higher education's goal, benefits, and attributes through the Gutman's Means-end theory of decision-making. This research focused on developing a conceptual framework that works as a frame of reference, contributing to the extant body of knowledge in the field of strategic management and decision-making literature by articulating an easy-to-follow process for assessing the higher education's external environment before shaping the goal of higher education to facilitate the attainment of benefits and the definition of the HEIs' attributes.

This consisted for two main theoretical contributions. First, the conceptual model presented an approach justified by empirical results to relate the influence of the external environment to the goal-shaping through the aid of the extant literature in the field of analysis and decision theories. The framework further emphasised the need for appropriate frameworks for external environment assessment as a widely-recognised necessity in the existing literature. The second main contribution was the introduction of a dynamic process (i.e. OODA Loop) to make the assessment faster and more dynamic, thereby saving the decision-maker time and effort, as well as a holistic idea about the relationship between ends (goals) and means (attributes). Although this framework was developed to aid the HEI authorities to shape the goal of higher education in a specific environment, it can now be utilised to assess external environment factors in any other managerial field, from health to business.

8.4.2 Practical Contribution

It is extremely important to be reminded that higher education in any society has three core function; education, research, and public service (Bowen, 2017). Based on that, this study is of significant relevance to academic researchers, policymakers, HEI authorities and practitioners. It provides them with a deeper understanding of the influencing factors that encourage or hinder the adoption of any higher education policy. By doing so, the conceptual framework can be utilized to support all three levels of management (i.e. strategic, tactical, and operational) when making decisions regarding the shaping of the goals of higher education, attaining its benefits and defining its attributes.

Due to this fact, both the theoretical and practical contributions merge to create a frame of reference that can be adopted by the higher education authorities. This framework provides the strategic management and other concerned beneficiaries with clear guidelines that can be utilised when making decisions regarding shaping the goals, assessing the benefits, and defining the attributes of successful higher education policies, at both the individual and collective levels.

8.5 Research Limitations

With any research study, there exist limitations that hinder or prolong the research. The major limitations of the current research are discussed below:

The key limitation that the researcher identified was the acceptance of the idea posed by other academics as an out-of-the-box idea and the reluctance of people to change their norms and beliefs. As indicated in the literature review, most of the authorities adopted ready-made imported policies and depended on experiences in another environment, which usually led to failure due to the differences between one environment and another.

Another limitation of this research is the fact that the context is a sovereign issue for many governments that is handled with great sensitivity and conservatism. The structure of higher education in Bahrain is complicated even though it is a

small country, due to the fact it exists before the regulations were introduced to govern and regulate it, making this a relatively haphazard field. Therefore, it may be difficult to generalize the results of this study to all HEIs in other countries. However, the relatively close fit of the research findings to the themes found in the literature review suggests that, in practice, these differences may be less critical in terms of identifying the key themes to be considered when shaping the goals of higher education considering the effect of the local environment.

The third and final limitation was related to the research methodology, as discussed in Chapter Four, which focused on the use of the qualitative method to collect the data for this study. In fact, the qualitative method facilitates the generalisation of lax, rich contextual data, which is associated with human and organisational matters. However, there are some disadvantages as well, such as the fact that this method is time consuming and controversial. The data collected from the case study were specific, which made it difficult to apply a software-based analysis.

Despite these limitations, the current study presents significant empirical evidence related to the assessment and influence of the external environment on the shaping of Bahrain's higher education policies.

8.6 Lessons Learned from Assessing the Higher Education Environment

After completing the thesis, the researcher confirmed the importance of higher education to the individual as well as society, as it is a pivotal factor for continuous growth and development as well to enhance countries' economies. A major challenge related to higher education assessment was the absence of a unified vision and mission for the higher education sector among the different levels of beneficiaries. The tentative lessons outlined below represent an extrapolation of the key lessons learned from the case study and can guide researchers and practitioners toward a better understanding of these tools in a public-sector context:

Lesson 1: The importance of higher education for human sustainable development dictates that the strategic decision-makers should pay more attention throughout the process, from planning to implementation and evaluation, to ensuring that the goals that are defined globally are achieved and met.

Lesson 2: Although the higher education environment might appear similar across the world, it was found to differ and be unique for each country depending on many external factors, such as demography, infrastructure, culture, economy, and regulation. For example, what works in one developed country might fail in another and will probably fall short in a developing country with a different environment and differing needs.

Lesson 3: The advancement of technology and increased competition requires a more dynamic decision-making model that offers the concerned beneficiary a tool that is sufficiently flexible and versatile to cope with the fast pace of changes within the environment.

Lesson 4: The higher education sector is not an isolated island. A successful higher education sector heavily depends on a well-prepared student with a strong foundation in basic education.

Lesson 5: Some academics consider higher education sector as commodity or business, but it must be treated differently from other products or services provided by this sector as it doesn't affect only the individual but also humanity in general through the achievement of sustainable human development.

The above-mentioned lessons should generally be useful and should be carefully studied and applied in the right context when drawing the big picture of the higher education sector, whether publicly or privately, individually or collectively.

8.7 Future Research Recommendations

Although the empirical research validated the conceptual framework, this thesis can be further improved and developed. Considering the reflections and limitations of this research, the researcher recommends further researches as follows:

- The framework for assessing the external environment of higher education was based on a single case study of Bahrain. Consequently, higher education's external environment in other countries may contain different regarding factors affecting higher education's goal, benefits, and attributes. Therefore, the results of this research cannot be generalised to all countries, even though they are in alignment with the examined literature. The researcher thus endorses the validation of this framework in other countries.
- Since the framework offers a holistic view of higher education's external environment, it might prove helpful to divide the framework into its various elements and assess each one individually to assess the influence of other external factors on the attributes of the HEIs, for example.
- Based on the empirical findings, the researcher observed that a huge gap exists between the different higher education beneficiaries' perspectives. For that reason, further research is required to investigate how this void can be bridged, especially when higher education goals are in alignment among all levels of concerned beneficiaries.
- This research investigated the influence of the external environment on the public higher education sector in Bahrain. Therefore, further research may be required to understand the influence of the external environment on the private higher education sector to understand why it is failing to attract an enough student in Bahrain, as shown in Chapter Two.

Finally, this research focuses on the external environment of the higher education sector, so it may be equally useful to shed the light on the internal environment to assess the strengths, weaknesses, opportunities, and threats faced by the higher education sector in Bahrain.

9.0 References

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10.0 Appendices

Appendix 1 Litter of Permission 1



RE: Permission to Conduct Research Study

Dear Polytechnic Bahrain

I am writing to request permission to conduct a research study at your organisation. I am currently undertaking a PhD research entitled "Evaluating Bahrain's Higher Education Institutions Benefits in the Context of Means-End Theory". My research sheds the light on the impact of attainment of higher education benefits on the evaluation and selection process of HEIs by concerned stakeholders. The first stage of the work necessitated an interview with different stakeholders in public and private sector higher education institutions in Bahrain. The aim of the research is to understand the higher education benefits role in the decision process of evaluation and selection of HEs.

The research objectives are: to analyse the external environment in which higher education institutions work and practice in The Kingdom of Bahrain, examine the goals of higher education set by the state, and check if the attributes and attainment of benefits serve the higher education goals.

The decision to choose your organisation was based on the excellent background and high reputation of your organisation in the field of higher education in Bahrain, which provides good environment and samples for the current research.

As you are aware of the importance of higher education in the development of national economy and states advancement, this research will try to present a frame of reference to the decision maker to evaluate and select the HEIs based on the relationship between goals, attainment of benefits, and attributes.

If you would like a summary of the research findings I would be pleased to forward a copy on completion of the research. If you have any further questions or would like a discussion with me prior to making up your mind, please contact me on [+973 36555822](tel:+97336555822) or [+44 \(0\)7479239692](tel:+4407479239692). Also, you can contact me at my official email address: ali.mahmood@brunel.ac.uk. Your approval to be part of this study will be greatly appreciated and gratefully received; I hope you will be able to assist in furthering my research studies.



If you agree, kindly sign below and return the signed form by official email mentioned above. Alternatively, kindly submit a signed letter of permission on your company's letterhead acknowledging your consent and permission for me to conduct this survey/study at your organisation.

Yours Sincerely,

Ali Mohamed Mahmood

PhD Research Student

Approved by:

Print your name and title here

Signature

Date

Appendix 2 Litter of Permission 2



UNIVERSITY OF BAHRAIN
Deanship of Admissions & Registration
Department of Admission & Gradates Affairs

جامعة البحرين
عمادة القبول والتسجيل
داشرة القبول وشؤون الخريجين

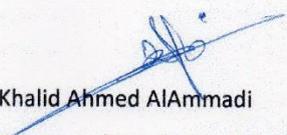


Dear Ali Mohamed Mahmood,

We are aware about your research that sheds the light on the impact of attainment of higher education benefits on the evaluation and selection process of HEIs by concerned stakeholders. The first stage of the work necessitated an interview with different stakeholders in public and private sector higher education institutions in Bahrain.

I would like to inform you that University of Bahrain Has no objection on supporting you in conducting your research through facilitating entry to the university to interview elected academic and administrates personal. Interviewing the student will be subject to their consent.

Wishing you success



Khalid Ahmed AlAmmadi
Director of Admission & Gradates Affairs



P.O. Box: 32038 - Kingdom of Bahrain
Tel.: (+973) 17437117
Fax: (+973) 17449833

صندوق بريد: ٣٢٠٣٨ - مملكة البحرين
هاتف: ١٧٤٣٧١١٧ (+٩٧٣)
فاكس: ١٧٤٤٩٨٣٣ (+٩٧٣)

Appendix 3 List of Codes Used in Data Analysis

Nviov -Codes Generation	Nviov -Codes Generation
Code	Code
External Environmental Factors	Individual Benefits
Demographical	Societal Benefits
Infrastructure	Private Market Returns
Social	Private Non-market Returns
Cultural	Societal Market Returns
Economic	Societal Non-market Returns
Financial	Higher Education Structure
Regulations	Higher Education Sector in Bahrain
Rules	Ministry of Education
Higher Education Goal	Higher Education Council
Higher Education Values	Bahrain Economic Vision
Higher Education Consequences	Bahrain 2030
Higher Education Benefits	Higher Education Student
Higher Education Returns	Higher Education Guardian
Higher Education Attributes	Higher Education Parent
Higher Education Characteristics	Higher Education Administrators
Decision-making Process	Higher Education Institution Staff
Decision Making Policies	Digital Literacy
Decision-making Models	Communication Network
Higher Education Institutions	Basic Education Status
Colleges	Unclear Answers
Universities	Unexpected definitions
beneficiary	Unanswered Questions
Shareholders	Answers out of content

Appendix 4 Letter of Ethical Approval



College of Business, Arts and Social Sciences Research Ethics Committee
 Brunel University London
 Kingston Lane
 Uxbridge
 UB8 3PH
 United Kingdom
 www.brunel.ac.uk

20 June 2017

LETTER OF APPROVAL

Applicant: Mr Ali Mohamed

Project Title: Evaluating the Higher Education Sector Benefits in the Context of Means-End Theory

Reference: 6685-LR-Jun/2017- 7454-1

Dear Mr Ali Mohamed

The Research Ethics Committee has considered the above application recently submitted by you.

The Chair, acting under delegated authority has agreed that there is no objection on ethical grounds to the proposed study. Approval is given on the understanding that the conditions of approval set out below are followed:

- The agreed protocol must be followed. Any changes to the protocol will require prior approval from the Committee by way of an application for an amendment.

Please note that:

- Research Participant Information Sheets and (where relevant) flyers, posters, and consent forms should include a clear statement that research ethics approval has been obtained from the relevant Research Ethics Committee.
- The Research Participant Information Sheets should include a clear statement that queries should be directed, in the first instance, to the Supervisor (where relevant), or the researcher. Complaints, on the other hand, should be directed, in the first instance, to the Chair of the relevant Research Ethics Committee.
- Approval to proceed with the study is granted subject to receipt by the Committee of satisfactory responses to any conditions that may appear above, in addition to any subsequent changes to the protocol.
- The Research Ethics Committee reserves the right to sample and review documentation, including raw data, relevant to the study.
- You may not undertake any research activity if you are not a registered student of Brunel University or if you cease to become registered, including abeyance or temporary withdrawal. As a deregistered student you would not be insured to undertake research activity. Research activity includes the recruitment of participants, undertaking consent procedures and collection of data. Breach of this requirement constitutes research misconduct and is a disciplinary offence.

Professor James Knowles

Chair

College of Business, Arts and Social Sciences Research Ethics Committee
 Brunel University London

Appendix 5 Participant information sheet
**Assessing the Influence of External Environment
Factors on Higher Education Sector through
Means-end Theory of Decision Making:
The Case of Bahrain**

Are you a member of a higher education sector in Bahrain?

If yes, you are being invited to take part in a research study. Before you decide to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Please ask, if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part. Thank you for reading this.

What is the purpose of this study?

The aim of the research is to understand the higher education benefits role in the decision process of evaluation and selection of HEs. The importance of higher education is clearly visible through the rapid increase of higher education institutions world. This made the decision and selection of HEIs a complicated process that involves confining it to marketing. This study will help the stake holder make sound decision based on relating the higher education state's goals to attainment of benefits to select the HEIs that serve the goals.

Why have I been invited to take part?

Concerned higher education members in The Kingdom of Bahrain are invited to participate in this study. An interview will be conducted through formal means after access granted. As it is important that the study include a wide variety of participants, a group of 10 to 12 interviews will be conducted with different levels of concerned stake holder.

Do I have to take part?

You do not have to participate in this study. Participation is completely voluntary. If you decide to participate in the study, you can withdraw at any

time without giving a reason for your withdrawal. If you decide not to participate in the study, or if you withdraw from the study, you will not be disadvantaged in any way and you will not give up any benefits that you had before entering the study.

What do I have to do if I take part?

If you agree to take part in this study, you will be asked to attend an interview that will discuss the environment of higher education in Bahrain and the importance of higher education for the economy of the country the interview will takes 20-30 minutes to complete.

Can I refrain to answer any question?

Yes, if you would prefer not to answer any question, you are completely free without explaining your decision.

What are the possible benefits of taking part?

There are no direct benefits to taking part in this study.

What are the possible disadvantages and risks of taking part?

There are no known benefits or risks for you in this study. If you feel uncomfortable completing the interview you may chose not to answer a question or a section or withdraw your participation from the study at any time. If you wish to discuss any issues raised by any question after you have completed it, then you can contact me freely any time on the given contact details below.

What if something goes wrong?

If the participants have any concerns or any unclear information. Please, speak directly to the researcher or contact him via his email: ali.mohamed@brunel.ac.uk .

Will my taking part in this study be kept confidential?

The completion of the interview is anonymous; it does not request any identifiable information. Should you want to request a summary of the study findings, you will need to provide your email address. However, this will be done separately to the survey and will be in no way associated with your responses, so these will remain anonymous. All email addresses will be kept strictly confidential. All data will be stored on a Brunel server, password protected, and the data will be destroyed when no longer required.

Can I take part in the study without giving my contact details?

Yes, you can complete the questionnaire without giving your contact details if you wish. Consequently, you will not be able to get the findings of this research study.

What will happen to the results of the research study?

The anonymous results of the study will be used as part of a PhD project and will be submitted for publication or presented at a conference. Results of the study will be available on request. The findings of this research will be published in an academic thesis.

Who is organising and funding the research?

The research study is being organised within the College of Business, Arts and Social Sciences, Brunel Business School, at Brunel University London and Its self-funded (by the researcher), no any expenses or payment will be applied; the participants in on volunteer base.

What are the Indemnity Arrangements?

This study has not any risk. So, indemnity arrangements have not applied.

Who has reviewed the study?

This study is reviewed by the Research Ethics Committee of the College of Business, Arts and Social Sciences, Brunel Business School, Brunel University London.

What if I have a complaint?

If you have any concerns or complaints about the conduct of the researchers or the study, please contact:

The Chair of the College of Business, Arts and Social Sciences Research Ethics Committee,

Email: cbass-ethics@brunel.ac.uk

Note:

'Brunel University is committed to compliance with the Universities UK Research Integrity Concordat. You are entitled to expect the highest level of integrity from our researchers during their research.'

Contact for further information:

You can get more information or answers to your questions about the study, your participation in the study, and your rights by contacting:

Researcher:

Ali Mohamed Mahmood Mohamed

Mob: [+973 36555822](tel:+97336555822) Or [+44 \(0\)7479239692](tel:+4407479239692)

Email: ali.mohamed@brunel.ac.uk

Supervisory Team:

1st Supervisor:

Dr Muhammad Mustafa Kamal

Tel: +44 (0) 1895 267728

Email: muhammad.Kamal@brunel.ac.uk

Thank you very much for taking the time to read this information

Appendix 6 Consent Form



SAMPLE CONSENT FORM

The participant should complete the whole of this sheet

Please tick the appropriate box

	YES	NO
Have you read the Research Participant Information Sheet?	<input type="checkbox"/>	<input type="checkbox"/>
Have you had an opportunity to ask questions and discuss this study?	<input type="checkbox"/>	<input type="checkbox"/>
Have you received satisfactory answers to all your questions?	<input type="checkbox"/>	<input type="checkbox"/>
Who have you spoken to?		
Do you understand that you will not be referred to by name in any report concerning the study?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand that you are free to withdraw from the study:		
• at any time?	<input type="checkbox"/>	<input type="checkbox"/>
• without having to give a reason for withdrawing?	<input type="checkbox"/>	<input type="checkbox"/>
• (where relevant, adapt if necessary) without affecting your future care?	<input type="checkbox"/>	<input type="checkbox"/>
(Where relevant) I agree to my interview being recorded.	<input type="checkbox"/>	<input type="checkbox"/>
(Where relevant) I agree to the use of non-attributable direct quotes when the study is written up or published.	<input type="checkbox"/>	<input type="checkbox"/>
Do you agree to take part in this study?	<input type="checkbox"/>	<input type="checkbox"/>

Signature of Research Participant:

Date:

Name in capitals:

Witness statement

I am satisfied that the above-named has given informed consent.

Witnessed by:

Date:

Name in capitals:

Researcher name:	Signature:
Supervisor name:	Signature:

Appendix 7 Interview Questions (Final)
Section A – General Interviewee Information

A.1 Interviewees' Age group

- 17 - 24
- 25 – 34
- 35 – 44
- 45 – 54
- More than 54

A.2 Interviewees' Gender

- Male
- Female

A.3 Interviewees' category/ Role

- High school graduate
- Parent
- HEIs student
- HEIs academic
- HEIs administrator

A.4 If you are a HEIs academic or administrator, how long ago since you have been engaged in higher education?

- Less than 10 years
- 10 -20 years
- 21- 29 years
- More than 30 years

Section B – Higher Education Environment background

B.1 According to your understanding and knowledge, provide a brief description of higher education structure in Bahrain?

B.2 According to your knowledge, are higher education institutions in Bahrain evaluated or ranked in any way? Please briefly describe the process and or the criteria followed.

B.3 from your perspective, how efficient is the evaluation process of HEIs in your in Bahrain?

Efficiency	Not efficient	Less efficient	Fairly efficient	Moderately efficient	Efficient	Highly efficient	Extremely efficient
	1	2	3	4	5	6	7
HEIs Evaluation Process							

B.4 Why do you think that higher education is important to Bahrain?

Section C – Integrating Means- End Theory in Evaluating Higher Education Sector

External Environmental Factors Affecting the Higher Education Sector:

C.1 In your perspective, indicate the significant effects of the following external factors on shaping the goals of HE in Bahrain.

Classification	Impact Factor on Shaping Higher Education Goals	Not Significant	Less Significant	Fairly Significant	Moderately Significant	Significant	Highly Significant	Extremely Significant
		1	2	3	4	5	6	7
Demographic	Population Size							
	Gender Ratio							
	Average Age of Population							
	Socio-economic Status							
	Ethnicity							
Infrastructure	Communication Network							
	Digital Literacy							
	Road Network Status							
	Basic Education Status							
Cultural	Social Values							
	Attitude toward higher education							
	beliefs							
	Norms							
Economic	Average income							
	GDP							
	Unemployment rate							
	Nature of economy							
Regulations	Higher Education Council Regulations							
	BQA HEI Indicators							
	HEI Regulations							

beneficiaries' Defined Goals of higher education sectors.

C.2 From your perspective, what is the main goal of higher education?

C.3 Are existent higher education structure and policies aligned with the goal of higher education?

C.4 To what extent do higher education institutions tuition and financial policies affect higher education enrolment and completion?

C.5 What steps has a state taken to build the infrastructure and encourage higher education institutions to collaborate-with one another, with high schools, with business and industry-in order to foster the goal of improved preparation as well as economic development?

C.6 From your perspective, how do you think higher education defined goals must affect the attributes of the HEIs in Bahrain?

C.7 In your perspective, do you think that the goals of higher education in Bahrain were shaped based on its environment?

Attributes of Higher Education Sector in Bahrain

C.8 In your perspective, what are the attributes of successful HEIs in Bahrain?

C.9 In your opinion, how do you prioritize Attributes of higher education institutions in Bahrain?

C.10 In your perspective, do you think that attributes of HEIs in Bahrain are shaped based on higher education goals?

Attainment of Benefits of Higher Education Sector in Bahrain

C.11 How significant is the following benefits to your decision when thinking about higher education?

Benefit of Higher Education	Not Significant	Less Significant	Fairly Significant	Moderately Significant	Significant	Highly Significant	Extremely Significant
	1	2	3	4	5	6	7
Higher earnings							
Higher chance of employment							
Increase entrepreneurial skills							
More revenue to the state							
Better social-economic status							
Becoming more gender nonbiased							
Improved lifestyles							
More community contribution awareness							
Reduce unemployment rates							
Other							

C.12 Indicate how significant are the following reasons to your decision to join HEI?

Reason for Going to HEI	Not Significant	Less Significant	Fairly Significant	Moderately Significant	Significant	Highly Significant	Extremely Significant
	1	2	3	4	5	6	7
Study my favourite major							
Learn and development							
Pursuit a specific career							
Be intellectually challenged							
Learn essential life skills							
Get a job or find a better one							
It is a turning point in my life							
Make more money							
Be more independent and freer							
Progression after school							
Experience university life							
Meet new people, make friends							
I was expected to go to university							
People I know go to university							
Other							

***If you answer other, please specify:**
