

**Planning for Entrepreneurialism in a Rentier State
Economy: Entrepreneurship Education for Economic
Diversification in Oman**

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Declaration

This work has not been submitted in substance for any other degree or award at this or any other university or place of learning, nor is being submitted concurrently in candidature for any degree or other award

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Dedication

To the soul of my beloved late Sultan Qaboos bin Said, who passed away before completing this thesis. He will always be remembered for all his love and countless accomplishments for his people, which have resulted in legendary success in transforming Oman into a modern country.

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List of Abbreviations

BA	Bachelor of Arts degree
BSA	British Sociological Association
CMEs	Coordinated Market Economies
CU	Cardiff University
EE	Entrepreneurship Education
EEP	Entrepreneurship Education Programme
ET	Education and Training
EU	The European Union
FDI	Foreign Direct Investment
GCC	Gulf Cooperation Council
GDPs	Gross Domestic Products
HCT	Human Capital Theory
HE	Higher Education
HECoS	Higher Education Classification of Subjects
HEIs	Higher Education Institutions
HMEs	Hierarchical Market Economies
HSEs	High Skill Ecosystems
IE	International Enterprise
IT	Information and Technology
ITE	The Institute of Technical Education
LMEs	Liberal Market Economies
MA	Master of Arts degree
MD	Medical Degree
MOHE	Ministry of Higher Education
NCEE	The UK National Centre for Entrepreneurship in Education
NCSI	National Centre of Statistics and Information
NGO	Non-Profit Organisation
NIE	National Institute of Education
NTU	Nanyang Technological University
NUS	The National University of Singapore
NVivo	Qualitative Data analysis Computer software package produced by QSR International
NYP	Nanyang Polytechnic
OAAA	Oman Academic Accreditation Authority
OECD	The Organisation for Economic Co-operation and Development
OMR	Omani Rial

PhD	Doctoral Degree
R&D	Research and Development
SCP	Supreme Council for Planning
SIRS	Singapore Institute of Retail Studies
SMEs	Small and Medium-Sized Enterprises
SOSCI	School of Social Sciences
SPRING	Standards, Productivity and Innovation Board
SPSS	The Statistical Package for the Social Sciences
SQU	Sultan Qaboos University
STEM	Science, Technology, Engineering and Mathematics
TRC	The Oman Research Council
VET	Vocational Education and Training
VoC	Varieties of Capitalism

Abstract

There is a growing interest in entrepreneurialism as a way to develop and diversify economies around the world. Entrepreneurship Education (EE) is believed by some governments to have the potential to develop entrepreneurial skills and knowledge and change students' mindsets and attitudes regarding SME start-ups, as one way to create a more entrepreneurial economy.

This thesis investigated the potential of a higher education entrepreneurship education programme to expand the number of entrepreneurs in Oman, as one element of the government's skill formation strategy, and thereby contribute to economic diversification. A mixed method approach was adopted, comprising a small-scale survey and semi-structured interviews, to generate data on stakeholder understandings of entrepreneurialism and their perceptions of the programme.

The thesis reveals that understandings of entrepreneurialism and the development of entrepreneurial attitudes are influenced by a wide range of political, economic, social, and cultural factors, which in Oman's rentier state context have particular implications for the way the Entrepreneurship Education Programme (EEP) is implemented and then received by its users. Ultimately, the programme, in its current form, appears to influence the way in which the students in this study understand entrepreneurship, but seems unlikely to deliver the entrepreneurial skills and mindset changes needed to grow the number of students intending to engage in entrepreneurial activity following graduation.

The findings draw attention to the limitations of education and skill policies based on Human Capital Theory (HCT) and guided by 'supply side' imperatives. Instead, the thesis emphasises the importance of considering contextual specificities when designing and implementing national educational policies. It encourages, moreover, further research to improve policy and practice with regard to the implementation of entrepreneurship education programmes. The current policy focus needs to be extended to consider the wider economic and societal context for diversifying the economy.

1. Chapter One: Introduction

1.1. Preface

This thesis investigates the potential of an Entrepreneurship Education Programme (EEP) to develop entrepreneurial knowledge, skills, and aspirations thereby aiding in diversifying the national economy. To do so, the study examines the perceptions of stakeholders within the higher education arena, as well as those of policymakers and entrepreneurs in the rentier-state context of Oman.

This chapter starts by outlining the background and significance of the study (Section 1.2). It then sets out the research objectives, questions, and theoretical and conceptual framework (Section 1.3), and concludes with an outline of the thesis's structure (Section 1.4).

1.2. Background and Significance

Policies for entrepreneurship emerged post-World War II due to a need for developed countries to spur innovation and for developing countries to reduce unemployment through self-employment (Roomi 2013). However, over the past three decades, entrepreneurship has become a buzzword worldwide (Drucker 2014), attracting the attention of policy-makers, academia, businesspeople and others. It was believed that small and medium enterprises (SMEs) could create new jobs and, in turn, decrease unemployment (Wingham 2004; Stevenson and Lundström 2007). By the beginning of this century, entrepreneurship had been linked to notions of innovation, economic growth, productivity, job creation and sustainability (Sanyang and Huang 2010; The World Bank 2010).

The Sultanate of Oman is no exception to the interest in entrepreneurialism and views it as a central way to help diversify its oil dependent economy (Ennis 2015) and push the Omanisation process, which is the policy for replacing expatriate workers with Omani citizens (Tanfeedh 2017). His Majesty the late Sultan¹ declared:

The National Economy of a country is in fact based on small and medium industries; these are the fundamentals, the foundations of all national economies (Riyada, 2014).

In all of the government's five-year economic plans and its Vision 2020, Omanisation has been emphasised through privatization policies and plans. Starting from the 2000s, increasing entrepreneurship and the number of SMEs began to be seen as a strategy

¹ The late Sultan Qaboos passed away on 10 January 2020 before the completion of this thesis.

which could supplement the process of Omanisation and strengthen the private sector hence diversifying the economy. His Majesty the late Sultan first mentioned the concept of “small enterprises” in 2000:

We repeat our call to the private sector to take the lead in this respect and to work hard with a high national spirit towards increasing the level of Omanisation in both the large and small enterprises and companies in the private sector (Oman Council 2000).

He explained that citizens who establish their own projects will not only benefit themselves but also their families and the whole community. ‘Failing to act and talking about obstacles and hurdles will lead to nowhere,’ he said (Omanuna 2010).

Therefore, Oman initiated numerous programmes to grow entrepreneurship (some of which are discussed in Chapter Three, Section 3.4.1). A central component of these is an EEP for Higher Education institutions (HEIs). The decision to start this programme was made at the 2012 Sayh AlShammikhat National Symposium². In response to this symposium, the Ministry of Higher Education (MOHE) issued Ministerial Decree No. 71/2013 requiring all Omani HE institutions to introduce a compulsory EEP. A guidebook providing a roadmap for institutions to follow when designing their curriculum was subsequently approved by the Oman Education Council on 17 March 2014 (Oman Ministry of Higher Education 2013). The course was required for all HE students enrolled starting academic year 2014/2015 and became an elective for students that were already in HE by the time the EEP was approved (Oman Education Council 2014).

As in many other countries, policymakers in Oman view education as an efficient tool for changing the fortunes of an economy, including through changing mind-sets and developing skills for particular career pathways (Keep 2014). Furthermore, it is believed that investment in education and skills builds human capital (Becker 2009), which can be the foundation of economic growth and social justice (Keeley 2007).

This study contributes to the body of literature on rentier states, educational policy for economic diversification, and entrepreneurialism in three ways. First, it analyses the importance of the wider political, economic, social and cultural aspects of Oman’s rentier state context as it attempts to transition its economy away from rentierism by adopting entrepreneurialism. Second, the study discusses the EEP as part of wider skill formation

² It was held in an area called Syah AlShammikhat based on His Majesty’s royal decree and resulted in 14 decisions for supporting SMEs such as pushing Omanisation through SMEs, dedicating land plots for Omanis who intend to start SMEs and initiating an educational programme in the HE sector (Times of Oman 2015).

strategies in the context of Oman's skill formation system – specifically with regards to the development of skills and intentions for entrepreneurship³. More generally, Oman's strategy has been to expand the supply of graduates and make policy decisions focused on building skills that can be utilised in areas of the private sector, which Oman aims to develop. Similar approaches have been seen elsewhere in the world, e.g. the expansion of the graduate Science, Technology, Engineering and Mathematics (STEM) skills supply in the UK, which is based on the assumption that HE students with these skills would create demand in the private sector (Payne 2012). For example, Oman has transformed five colleges of education (which were formerly graduating primary and secondary teachers) into colleges of applied sciences focusing on engineering, business, information and communication technology to develop skills for employment in related sectors. In addition, all HEIs established since 2000 have been directed to offer similar majors to help supply skills mainly for the purpose of replacing expatriates in these sectors, particularly within the private sector, as part of the Omanisation process (as defined above) (Oman Ministry of Higher Education 2015).

The study examines the potential of the EEP to develop entrepreneurial skills and supply the market with graduates who intend to pursue entrepreneurial activities post-graduation (see research objectives and questions)⁴. Overall, the research uses the EEP as a lens to analyse how this programme might play out as a skill formation strategy in rentier state contexts might contribute to economic diversification. There is little skill formation research in these contexts, particularly in Middle Eastern developing countries – Al-Shammari (2009) discussed skill formation in Saudi Arabia, but this is one example of what is a very limited literature.

³ Skill formation strategies relate to broader strategies of supply, demand, and utilisation, particularly as they relate to high and low skill pathways (see Lloyd and Payne 2004). Skill formation systems relate to the mechanisms (education and training structures) for delivering skills and how they are focused and structured. Both reflect broader structures of political economy (e.g. Bosch and Charest 2008) but the relationship between them and economic competitiveness (or outcomes) is not linear because there are intervening factors (e.g. technology, business strategy, Human Resources Management (HRM) practices, etc), but at the national level strategies and systems tend to inform each other. What is a factor in both is the way different politics and policies shape them, with the role of different stakeholders (policy makers, employers, trade unions, workers and students, etc.) determining the different shape of systems, strategies and outcomes e.g. see Bosch and Charest (2008) on the difference between education and training systems in liberal and coordinated economies or Emmenegger et al. (2019) on differences within similar systems, such as social and liberal collective systems. The EEP is an element of a system introduced as part of wider strategy to boost the supply of entrepreneurs (Crouch 2005; Brown and Lauder 2009).

⁴ A study by Al-Abri et al. (2018) examined Oman's entrepreneurial ecosystem which requires examining broader elements. Studying Oman's entrepreneurial ecosystem is beyond the scope of this study. Ecosystem has a broader meanings than strategies and systems and combines social, cultural, political, economic elements.

Finally, this study examines the specific attributes of the EEP, which have been designed to facilitate entrepreneurialism and develop entrepreneurial skills among students. In essence, this thesis is an educational policy-practise study which investigates the implementation of an EEP. A study by Matlay (2009, p. 355) suggested that future research on EE should better address the expectations and needs of those he called “the stakeholders”. This thesis focuses on stakeholder perceptions and examines their expectations, as suggested by Matlay, adding a new case study (Oman) to the entrepreneurship education literature.

1.3. Objectives, Questions and Theoretical and Conceptual Frameworks

The study focuses on investigating the potential of an HE educational policy – on entrepreneurship education – to diversify the economy through, among other things, job creation for Omanis, expanding the private sector, enhancing SME growth, and developing young Omanis’ entrepreneurial skills and aspirations. Skill development has been a long-standing priority in Oman. Most of the country’s strategic plans have prioritised skill development for a long time (Al-Lamki 2000; Al-Kindi 2007).

The first part of the study describes Omani EE policy, explains why it has come about, and reviews its implementation. A major empirical part of the study is a critical analysis of this now mandatory Entrepreneurship Education Programme (EEP), which is taught in parallel with undergraduate students’ degree specialisations. One specific intention is to investigate the relationship between the EEP policy and its actual implementation in educational institutions. The study also explores the extent to which the EEP matches the expectations and experiences of HE students and faculty/staff (HE managers and lecturers). It involves examining the provisions used in practice to deliver this course to identify how it fits with the expectations of those who designed the policy, those who are responsible for delivering it, those receiving it, and those in the field (i.e. entrepreneurs). The main research question is:

How is the Entrepreneurship Education Programme (EEP) in higher education perceived to contribute to the aim of economic diversification in Oman?

To address this main question, three objectives and four sub-questions were specified:

Objective 1: To explore Omani HE student, faculty/staff, policymaker, and entrepreneur perceptions and understandings of entrepreneurialism.

Sub-question 1: How do HE students and EEP stakeholders understand entrepreneurship?

Sub-question 2: What is the role of the EEP in shaping HE student' and faculty/staff entrepreneurship understandings and aspirations?

Objective 2: To examine Oman's political, economic, cultural and social specificities, as shaping and facilitating of i) entrepreneurship understandings, and ii) engagement with entrepreneurialism.

Sub-question 3: To what extent does Oman's political, economic, and cultural context impact EEP stakeholder understandings of entrepreneurship and their engagement in entrepreneurial activities?

Objective 3: To investigate, through the lens of its EEP, the perceived potential of Oman's policy for entrepreneurial skills formation.

Sub-question 4: How likely is the EEP, in its design and implementation, to overcome barriers to entrepreneurship, expand the entrepreneurial skills supply, and increase the number of graduates who become entrepreneurs?

Given these research objectives and questions, the aim of this thesis is a critical analysis of stakeholder views on the potential of a specific educational policy to contribute to economic diversification. The framework for this has been established by identifying general concepts of entrepreneurship, and more specifically with regard to EE, as the central lens for the study. At the centre of this analysis is human capital theory (HCT), which over the past four decades has become *the* conceptual frame for education and skills policy development. Becker (1993, p.11) defined human capital as 'activities that influence future monetary and psychic income by increasing resources in people'. According to him, these activities are acquired through investments in schooling, on-the-job training, and other types of experience – most notably on-the-job experience.

Whilst HCT principles are "amenable to various calculations" in most of the basic economic contexts, skill formation literature has revealed that the concept of skill is much more complex (Monkge 2001, p. 49). First, while many studies discuss three levels of skills - low, medium, and high - (e.g., Attewell 1990; Ashton et al. 2017), I focus on high skills as the EEP has been implemented in the HE sector and intends to develop this level of skill. Contrary to most human capital literature, which focuses on the importance of additional years of schooling, the thesis analyses Oman's strategy for the formation of a specific skill type (entrepreneurship skills) within a given formal education level (higher education). Ashton et al. (2017) argue whether there exists a relationship between skills and economic performance, yet they state that many advanced economies have been attempting to produce higher-skilled workforces to boost their economies, which is also Oman's aim.

More specifically, when I refer to how the EEP policy defines entrepreneurial skills, I mean the skills which will enable graduates to develop their own businesses – albeit learning these skills within a HE context. The policy document points to the theoretical and technical skills that help students understand entrepreneurship and business ventures and enable them to develop satisfactory business plans (Oman Ministry of Higher Education 2015). Furthermore, I must consider Oman’s political, cultural, and social specificities (e.g. governmental, familial, religious influences), which will carry implications for the successful implementation of a skills policy i.e. the EEP. Oman is a monarchy, a rentier state, and a conservative society, and these aspects will shape government efforts to make the economy more diversified and sustainable by means of building entrepreneurship skills (see Chapter 3). Finally, and relatedly, it is essential to explore the literature on skill formation systems to be able to situate Oman’s system (and the political, cultural and societal specificities that shape it) and explain how the EEP, as a strategy for expanding skills supply, might make Oman’s economy more entrepreneurial and diversified (see, for example, Ashton et al 2017 for a similar analysis of contextual factors on skill formation). The following section outlines the structure of the thesis.

1.4. Outline of Study

This first chapter has set out the study objectives, questions, the theoretical and conceptual framework, and the study’s contribution to the literature. Chapter 2 explores the key literature which frames the argument of this thesis in more depth. This literature concerns policy implementation, human capital development, different skill formation models, entrepreneurship, and EE. The purpose of this chapter is to provide a theoretical framework and literature-based context for the study, setting the scene to discuss the Omani setting in the following chapter.

Chapter 3 explores Oman’s particular context, focusing on the theme of economic diversification and the Omanisation process. It identifies what has helped build and what has held back these processes since 1970. This chapter also introduces the reader to Oman’s population, political structure, economy, national economic strategic plans, and education system. The chapter then moves on to describe Oman’s current economy and skill formation system, and gives an account of entrepreneurship in Oman and its recent EE policy, in particular. Chapter 4 explains the study’s design and methodology. It justifies using quantitative analysis of student survey data and qualitative analysis of wider stakeholder perceptions, derived from in-depth interview data, regarding the study’s enquiries.

The following data analysis Chapters (5-7) address the research questions outlined for the thesis. Identifying the different meanings of entrepreneurialism in Chapter 5 prepares the ground for an examination of the potential for entrepreneurialism (as understood in Oman) to achieve the broader aims of economic diversification and 'Omanisation', according to key stakeholders. Chapter 6 then discusses how political, economic, social and cultural aspects shape the ways stakeholders perceive and engage with entrepreneurship.

The identification and explanation of these stakeholder perceptions is followed by an analysis of the role of the higher education sector (and specifically the EEP initiative) – as a vector of change – in generating HE students' entrepreneurial skills and in changing their intentions, which is the focus of Chapter 7. The discussion in Chapter 8 links, more broadly, the study's findings to the literature, its conceptual and theoretical framework, and to the data analysed in the previous three chapters. Chapter 9 concludes the thesis by outlining the study's key findings and addressing the study's objectives, questions, and contributions, as well as its limitations, recommendations, and suggestions for future research.

2. Chapter Two: Education and Skill Formation Strategies, Entrepreneurship Education and the Economy

2.1. Introduction

This chapter discusses key literature and theoretical framings related to this study's main areas of enquiry: education policy, skill formation systems, entrepreneurship, and EE. Section 2.2 explores the main characteristics of rentier states and transitioning economies and touches on Oman's status as both (discussed in more detail in the following chapter). Given that most rentier state countries are characterised as developing economies, the section also situates Oman as a developing or transitioning economy. Section 2.3 briefly explains the imperatives for the development of the entrepreneurship education policy and its implementation. Section 2.4 discusses human capital theory and its related critiques. Section 2.5 presents alternative accounts of advanced capitalist and post-industrialised skill formation systems, in order to better understand the way skill formation is shaped, with a focus on entrepreneurship. Selecting advanced models is justified by the scarce literature on skill formation literature about rentier state and transitioning economies.

The thesis then establishes a connection between skill formation strategies and literature on entrepreneurship (Section 2.6) and EE (Section 2.7). The purpose is to explore entrepreneurial education policies and programmes in other countries and examine the link with their skill formation systems. This provides a basis for conducting a similar analysis of the impact of Oman's rentier state structure and its skill formation system on the EEP policy and implementation in the empirical chapters of the thesis.

2.2. Rentier State Context

Importantly, the context for the thesis is particular. Oman is recognised as a rentier state and the features of this type of country have implications for entrepreneurship development. Rentier-state theory appeared in the period following the departure of the British colonial authorities in the 1960s from most Arab countries, particularly the Gulf Cooperation Council (GCC) states⁵ (Hanieh 2015). This theory assumes that rentier countries "receive on a regular basis substantial amounts of external rent which are rentals paid by foreign individuals, concerns or governments to individuals, concerns or governments of a given country" (Mahdavy 1970, p. 428). The notion of rent-seeking has a longer tradition in economics literature, having been introduced by Gordon Tullock

⁵ Saudi Arabia, Oman, the UAE, Qatar, Kuwait and Bahrain

in 1967 to define an economic income earned from resource ownership (Rowley et al. 2013). In the case of Oman these rents come largely from energy resources. In its diversification plan, Oman seeks to enlarge its non-energy national income from sectors such as tourism and logistics. Entrepreneurship has been considered a strategy to contribute to this national diversification plan.

There are political, economic societal and cultural implications of being a rentier state. Politically, Oman is a monarchy and autocracy because “a small fraction of the population is involved in the generation of oil revenues, the rest being engaged in the use of the oil wealth” (Beblawi 1987, p. 53). The oil being in the hands of the state puts it at the top of “hierarchy of layers” (Beblawi 1987, p. 53), which also means the state is not pressured to make political reforms or implement democratization (Ross 1999; Losman 2010). Because the government works to protect its authority, defence expenditures exceed the budgets allocated to health and education, thereby reducing the quality of public services (Karl 2007). Although this is true for Oman, education is its second largest public expenditure (Oman National Centre for Statistics and Information 2018). The main purpose for prioritising investment in education is to create jobs in the private sector by educating Omani people in order to replace expatriate workers (Oman Ministry of National Economy 1995).

Since rents from energy are the main national income, other local productive sectors, including industry, agriculture, and manufacturing, are likely to remain underdeveloped, thus causing a risk for long-term economic prospects. Typically, rentier states do not apply taxation due to having national budgets surpluses driven by energy revenues (Luciani 1990). Moreover, a tax-free environment should encourage more SME start-ups. However, in Oman and other GCC countries, the oil price collapse which started in June 2014⁶ (Oman Ministry of Oil and Gas 2016) led these states to announce plans for taxation for the first time since 1970. The rise in energy prices to an average of 65 USD in Oman in 2019 (Oman Ministry of Oil and Gas 2019), did not stop these states from continuing to initiate new policies (e.g., taxation) in order to reduce their economies’ dependence on income from oil, which can be unstable and is unsustainable. Recent marked drops in oil prices as a result of the COVID-19 virus and associated commercial/price wars between producers give further evidence of such instability. Oman’s oil price dropped to an average of 25 USD in April 2020 (Oman Ministry of Oil and Gas 2020).

⁶ The price continued decreasing sharply and reached 25 dollars per barrel in Oman by January 2016 (Oman Ministry of Oil and Gas 2016).

On the surface, these GCC states share many similarities, but there are some differences with the potential to shape entrepreneurship activity in different ways. For example, in two Gulf rentier states, Qatar and the UAE, the power resulting from autocratic governmental systems is argued by Ennis (2018) to have provided flexibility for the implementation of entrepreneurship policies. There is no comparable study which examines if this is also the case in Oman. In particular, it would be worthwhile for other GCC states to learn from the UAE's successful entrepreneurship model given that states share many similarities with other GCC states. According to Schilirò (2015), the UAE's success is due to its larger expenditure on providing entrepreneurial infrastructure, innovation strategy, strong science and technology skills, and soft and entrepreneurial skills⁷ compared with other GCC states.

Rentier state governments tend to be isolated from their societies (Beblawi 1987) and often implement strong social control. However, in Oman in 2011, demonstrations as part of the so-called Arab Spring awakened the government, which had been slow to recognise the demand for change and the need for social and political reforms (Worrall 2012). The monarch met most of the people's demands, including for more jobs and higher education opportunities for Omanis (Worrall 2012) although, as will be discussed the reliance on expanding public sector employment for Omanis is unsustainable, hence the drive for entrepreneurial activity.

This thesis examines the above as part of the "rentier mentality" – a mentality based on paternalism and reliance on the state to provide, which is a common feature in Oman and other GCC societies (Ramady and Kropf 2015) and its impact on entrepreneurship and EE. The mentality "embodies a break in the work-reward causation". Rewards – income or wealth – are not related to work but are risk-bearing due to chance or situation" (Beblawi 1987, p. 52). This mentality sits uncomfortably with what Schumpeter values about entrepreneurship: dynamism, innovation, and risk-taking (Schumpeter 1989). Also, it has caused policymakers to develop a mentality characterised by an attitude of "myopic sloth or paradoxically myopic exuberance", making them unable to execute adequate economic planning (Ross 1999, p. 309).

The discussion here is of the general rentier state literature with some specific focus on Oman (and other GCC states), as differences remain between GCC rentier states and those in other parts of the world (e.g., Iran, Nigeria, Venezuela, etc.). For example, in Iran, the monarch is elected and not hereditary, as in the GCC states. Regarding the GCC rentier states, they also differ in how urgently they are tackling economic

⁷ SMEs contributed 50% of GDP, forming 92% of the total companies in the UAE (Schilirò 2015) which is a greater percentage than in other GCC states.

diversification. Although all of them are endeavouring to *transition* their economies away from excessive dependence on oil revenues, Oman has been working towards this goal more urgently than some of the other GCCs (see more discussion in Chapter 3).

This thesis regards Oman as a transitioning economy, which Feige (1994, p.1) defines as an economy transforming from being "centrally planned into a market economy". Oman has been attempting its own transition from a rentier state economy into a more diversified, entrepreneurial economy⁸ and developing some market-based institutions. It has been working to privatise some of its state-owned enterprises, has joined the World Trade Organisation and has a free trade agreement with the USA (see Section 3.2.2 in Chapter 3). The consensus of a number of studies is that countries in transition are in need of entrepreneurship and innovation in order to reform and develop their 'clumsy' economies (e.g. Ateljević 2013, p. 238).

There are some features of a transitioning economy that have major implications for entrepreneurship. First, the unstable environment (e.g., unclear institutional context) and unsustainable private sector appear to affect entrepreneurship negatively (Ateljević and Trivić 2016, Williams et. Al 2017). For example, the support (e.g., financial) and protection (e.g., from corruption) for entrepreneurship and entrepreneurs is often weak (Ateljević and Trivić 2016, Williams et. al 2017). Second, from a social and cultural perspective, individualism, a characteristic of free market contexts, is an important component for entrepreneurship which transitional economies frequently lack (Ateljević and Trivić 2016). Finally, when it comes to education, it is noted that an EE policy can provide a strong boost to transitioning economies because it can play a contributing role in the process of internationalisation of firms (Rialti et al. 2017). The following section explores educational policies in more detail.

2.3. Educational Policy

This section unpacks related theories and literature pertaining to educational policies and their relationship with economic growth and relates them to the aims of this research. I focus on Oman's EEP (see Chapter 3) and the rationales used to justify its implementation⁹. The main purpose of the policy is to expand the number of entrepreneurs who can help diversify Oman's economy (Oman Ministry of Higher

⁸ It is important to note that Oman has kept its authoritarian monarchy and the transition is intended for economic diversification only (see Chapter 3).

⁹ The distinction between policy implementation and policy enactment is that implementation pertains to how precisely policies are followed in practice. Enactment concerns how institutions cope with multiple, similar, and contradictory policy requirements, which affords these institutions the space to forge and fabricate creative ways to implement these policy texts. The actual process of actualizing these policies is influenced by the institutional context in which these policies are re-contextualised, which can lead to heterogenized forms of practice (Braun et al. 2011).

Education 2015; Ennis 2018). This policy aim resonates with Human Capital Theory (HCT) arguments. The following section reviews this theory's principles and its connection to this study's aims.

2.3.1. Human Capital Theory

Investing in education is a global trend because of its potential importance in creating human capital as an economic asset (Becker 1964; Palacios 2011; Psacharopoulos and Patrinos 2018; Patrinos and Psacharopoulos 2020). HCT presumes skills and knowledge are human capital which can be created through investments in education, on-the-job training, and other types of experience, to produce individual returns and grow a nation's economy (Mincer 1974; Becker 2009). This investment can be made by individuals, the state, or employers and can be in the form of time, effort, or money. This investment in education and training (ET) makes individuals more productive by equipping them with the knowledge and skills that make them valuable in the labour market (Schultz 1961; Becker 1964). Furthermore, according to Schultz (1961) and Keely (2007) educating people makes them healthier and results in a more just society.

Studies on human capital typically measure it as the number of years spent in education (Becker 2009). An educational degree or training cumulatively gained over a certain period of time is viewed in Oman as more sustainable capital, e.g., qualifications or skills, unlike material tangible capital, which might be considered less stable. Indeed, the fluctuation of oil prices caused Oman to realise the importance of investing in education and skill formation to produce greater economic diversification through increased access to higher education. However, as other studies have argued, e.g., Wolf (2004) and Keep (2014), the economic benefit of education can diminish if there is an oversupply, such as of university graduates. In Oman, Al-Barwani et al. (2009) have predicted that HE expansion (and oversupply) may cause a brain-drain in the long run due to the slow progress of Omanisation and lack of demand in the country.

Some scholars have reported that there is a strong connection between investments in education, skills formation, and economic growth, including business and entrepreneurship growth (Brush et al. 2001; Davidsson and Honig 2003; Menzies et al. 2004). In addition, whilst some studies are more sceptical regarding this connection because these notions are difficult to define (Grugulis and Stoyanova 2011), others, for example, Romer (1989); Goldin (2016) have linked human capital investment with heightened innovation and creativity, which are identified as key entrepreneurial skills (see Section 2.6.4). Given the limited potential of HE expansion to diversify the national economy, Omani policy-makers have indeed more recently turned their attention to the development of entrepreneurship skills.

There are, however, various critiques of HCT that need to be considered. Exploring them is important for this study as it may raise questions concerning the narrow focus on human capital policy imperatives and expanding skill supply for economic diversification. The main criticism of HCT is that it views education only as a means to increase productivity and wages and neglects non-instrumental aspects such as learning for other non-economistic reasons, i.e. education for education's sake (Robeyns 2006). Sociological interpretations of HCT highlight uneven access to information on, and access to quality education based on socio-economic status, with the wider state of a country's economy and specific educational policy failures also having an impact (Santos 2011). Moreover, some question whether higher educational attainment is necessary to boost productivity. For example, both Wolf (2004) and Chang (2012) have asserted that investment in education does not necessarily make the economy more productive. For instance, Switzerland has the lowest number of graduates of all developed countries, yet it has the highest productivity rate (Chang 2012). Factors, such as "the regulatory environment"¹⁰, full utilisation of all population segments (increasing the participation of women and immigrants in the workforce), and expanding the non-banking sector by increasing SMEs through EE have increased Swiss productivity (Ollivaud 2017, p.75). This study takes such critiques into account when examining the potential of investing in the EEP as part of Oman's wider skill formation strategy to diversify the economy. In order to better understand and situate Oman's skill formation system, a review of the literature on skill formation systems is presented in the following section.

2.4. Skill Formation Systems

This section provides the context for this thesis by exploring key skill formation systems and their relationship with entrepreneurship development. This study examines the extent to which investing in EE for skill formation can nurture human capital and skills for the purpose of economic diversification. Several works, e.g., Busemeyer and Trampusch (2012) and Streeck (2012), have asserted that in order to understand human capital's contribution to economic performance in a specific context, it is vital to understand its skill formation system.

Exploring different political and economic contexts for skill formation is important for this study, which examines entrepreneurship education as part of Oman's strategy for skill formation. Olssen and Peters (2005) have previously argued that neoliberal contexts, with their limited state intervention, create different approaches to EE and that entrepreneurial activity is specific to context. Currently, however, there is little existing

¹⁰ Rules, policies, or regulations (including taxation) that businesses must adhere to (Ollivaud 2017).

research examining the impact of political and economic contexts on EE – especially not for rentier states. In order to properly explore Oman’s efforts to develop entrepreneurial skills and expand such economic activity, I must situate its skill formation system and thus reflect on various ‘models’: collective, liberal-market and developmental state. This discussion will provide some foundation for critical assessment. More detailed discussion of Oman’s skill formation system follows in the next chapter.

In terms of the political and economic context, Autio et al. (2014, p. 1106) contended that “high-quality” political and economic institutions (i.e., laws and regulations, enforced by the government to organise policies in economic and social systems) support entrepreneurship (see Section 2.6). Busemeyer and Trampusch (2012) mainly focused on collective systems, i.e., more corporatist systems of skill formation¹¹, whereas Gospel et al. (2013) looked at a wider array of systems, including Asian economies. Busemeyer and Trampusch (2012, p. 9) used dimensions of ‘the dominant venue for training, the degree of standardization and certification of skills, [...], the role of the state, and the linkages between skill formation and socioeconomic institutions’ to identify and categorise a range of collective systems (e.g., dual system, school based systems, and segmentalist systems). According to Busemeyer and Trampusch (2012, p.10) what distinguishes the collective system is that it creates socially stabilised, highly trained cooperative workers, particularly for SMEs.

Other theories, such as Hall and Soskice’s (2001) Variety of Capitalism (VoC) model, which divides economies into Liberal Market Economies (LMEs) and Coordinated Market Economies (CMEs), have provided a mostly firm-based analysis of political economics literature. According to this model, there is a dynamic and mutual interaction, which is called ‘institutional complementarity’¹², between skill formation systems and political economy contexts. Hall and Soskice’s VoC framework categorises a limited number of countries, mainly northern Europe and Anglo-Saxon economies. Recent studies have extended the VoC debate to include Latin American countries, which are Hierarchical Market Economies (HMEs) (Schneider 2013; Doering et al. 2015) as well as Mediterranean capitalist countries (Próchniak et al. 2016). Shanahan and Fellmann (2019) included these economies in the VoC framework to better understand of economic institutions, capitalism’s diversity, and any possible new institutional

¹¹ The state, firm (or employer) and association (or union) cooperate in developing skills which are mostly specific skills (firm-specific or industry-specific) which are gained through mostly vocational training, or dual apprenticeship programmes (i.e., combination of vocational training and in workplace-based and firm training) (Busemeyer and Trampusch 2012, p.10).

¹² The situations of interdependence between institutions, spheres, firms, and governments which often adopt their strategies benefit from these “complementarities” (Hall and Gingerich 2009, p.460)

foundations of economic growth. They further explained how these countries have adopted different approaches to governance.

An important distinction in VoC is the difference between 'general' and 'specific' skills and the way different systems lend themselves to different patterns of skills development and related outcomes. General skills are found where HE provides general human capital assets, which are then supplemented with the acquisition of more specific skills in the workplace through on-the-job training (Busemeyer and Trampusch 2012). General skills are frequently developed in Liberal Market Economies (LMEs) where there are deregulation policies, tax-breaks, competitive market arrangements based on supply and demand, a complete and formal contracting legal system, competitive firm relations, and firm-level wage bargaining. This deregulation in the labour market makes generic skills portable across firms which enables the individuals to move between firms and serves as insurance against unemployment. This also makes hiring and firing easy and cheap. In addition, most innovation is "radical"¹³, which could lead to a decrease in demand for low-skilled workers (Schneider 2009). In this context, individuals determine their skills because they are the actual skills utilizers and because generic skills are portable across firms (Busemeyer and Trampusch 2012).

Second, specific skills are associated with Coordinated Market Economies (CMEs), and acquired through apprenticeship education and a standardised training system (Busemeyer and Trampusch 2012). This type of skill creates incremental innovation¹⁴, appropriate for a medium tech environment (Schneider 2009). One example of this type of specific skills is mechanical and automotive skills, which are used in the automotive and machinery industries, such as those which exist in Germany (Ebner 2010). Furthermore, workers often have long-term contracts and wage bargaining is at the industry level, restricting worker movement. Labour market regulation makes it more difficult and expensive to fire workers than in LMEs. Thus, the firm uses its own capital to invest more in skill development, mostly in Vocational Education and Training (VET) (Benson et al. 2013). This also results in lower levels of poaching than in LMEs because social unions negotiate to make wages similar across companies (Busemeyer and Vossiek 2016).

Given that Oman's economy is authoritarian and state-led (see Chapter 3) and due to the absence of skill formation literature about the Middle East, I complement the above

¹³ Introducing a new product, service, strategy or process to the market which can make a significant impact in that market (Huo 2015).

¹⁴ Improvements or upgrades made to existing products, services, methods, or processes (Huo 2015).

typologies with a discussion of Developmental State economies and the state development capitalism model to draw some closer parallels with Oman¹⁵.

Although some studies tend to categorise Asian countries which are transitioning from underdeveloped into industrialized, post-industrialized, or knowledge economies as authoritarian (Gospel et al. 2013), most studies categorise them as examples of the developmental state model¹⁶ (Ashton and Sung 1994, Ashton et al. 2005). This is the phenomenon of state-led macroeconomic planning in East Asia which occurred in the late 20th century (Ashton and Sung 1994). These countries have strong industrial policies which has been the foundation of their economic success (Brown et al. 2007). In order to meet their economic transformation requirements, policies of transforming low-skilled employees into high-skilled ones were adopted to meet firms' skill supply needs. The majority of these skills are VET and specific skills (Ashton et al. 2005). The State is powerful and responsible for planning and developing the education sector and skill formation (Morris 1996). Therefore, the State coordinates supply and demand at the highest levels to suit its economic trajectory by controlling the skilled labour supply in the marketplace, skill demand industrial policies and trade. Long-term national strategies, protection, subsidies, and firm networks are some features of this type of the economy (Wade 2012), which also can be found to different degrees in the liberal and collective models discussed above.

Each of these skill formation systems has its own way of developing entrepreneurship based on wider contextual specificities of political economy, education and skills policies. Working within the context of the extant skill formation literature, and the main categorisations discussed above, this research begins to tentatively delineate Oman's skill formation system and examine it within the context of Oman's political-economy. This discussion provides the necessary basis for understanding entrepreneurship education as part of Oman's broader skill formation strategy (see Chapter 6) and the impact of this political economy and skill formation system on entrepreneurial engagement (see Chapter 7). For example, the policy of HE expansion, which exists across LMEs (and not so much in CMEs), is argued overall to be beneficial for innovation (Finegold 1999) and hence entrepreneurship. At the same time, however, problems can become evident with the more general unfocused expansion of HE. For example, "skills shortages" in certain segments of the labour market may remain, such as those requiring

¹⁵ Oman and Singapore shares some commonalities such as size of population, GDP income, large expatriate population, power of State, HE expansion policy, strategic location etc.

¹⁶ Countries associated with those who have mercantilist, nationalist, fundamentalist attitudes towards skill formation. Illustrative of this ideology are Germany and Japan during the interwar period, Spain, Portugal, and Argentina during the post-war period, and recent developmental states such as Singapore, South Korea, Indonesia, and Taiwan (Benson et al. 2013).

STEM skills, but “over-qualification” (over supply) in other skills such as arts and social sciences can also occur (Keep 2014, p. 253). It has been argued that this shortage of skills for paid jobs promotes the appearance that a larger number of “commercial entrepreneurs” exists by pushing people to start their own business (Teruel and De Wit 2017, p 237). Elsewhere, within Germany (a CME), for example, with its specific skill and incremental innovation context, there is a focus on high added value sectors such as “biotechnology” and entrepreneurship in technology in general. Here, well-established labour unions and associations help entrepreneurship grow in these sectors because it requires “complex co-ordination across teams of programmers and technicians” to successfully compete in the market (Casper and Whitley 2004, p.101).

What is evident is that contextual specificities (e.g., political economy, education systems, and social and cultural features) impact innovation (Busemeyer and Trampusch 2012) and entrepreneurship growth (Ebner 2010; Autio et al. 2014). For example, in countries where extensive state or government intervention supports R&D and innovation (such as within Developmental States), a certain type of entrepreneurship based on knowledge production is likely to flourish (Wang 2017). This is because State intervention can stimulate competitiveness and provide subsidies, for example, to help entrepreneurs to commercialise their innovative products and technology (Wonglimpiyarat 2013). As discussed in the following section, innovation is a key component of entrepreneurship. A study by Rusu and Roman (2016), found that European countries with higher levels of “innovation-driven” economic development have better entrepreneurial environments. In addition to innovation, research and development (R&D), diversity of activities, knowledge spill-overs, competitiveness, and motivation are other important characteristics of an entrepreneurial environment (Audretsch and Thurik 2004). Oman lacks some of these elements (Al-Rahbi 2008), which could be expected to limit entrepreneurship development, according to Audretsch and Thurik (2004).

However, one concrete example of providing an ideal environment in a rentier state context for entrepreneurship growth is the United Arab Emirates (UAE) and Qatar. According to Ennis (2018, p. 588), despite these two states sharing a similar form of political economy, skill formation, social and cultural commonalities as with other GCC states, including Oman, they have become an “entrepreneurial powerhood”, not only in the Middle East but also globally. Shedding light on the UAE, as it is closest context to Oman, there are key factors for its successful model. First, focusing on excellence in aviation facilitates the UAE role as a pivot point between east and west through employing Emirates and Etihad – the largest airways in the world. This role creates for the UAE a status and a domestic economic gain, e.g., nation brand hegemony and

international reputation. Second, the autocratic active visionary leadership in the UAE led to rapid development but also made the UAE “a form of liberal social engineering in an illiberal state” (see more Ennis, 2018, p.586).

This thesis investigates the implications of the above discussion for the policies Oman seeks to implement (i.e. with regard to entrepreneurship). The following section reviews the entrepreneurship literature.

2.5. Entrepreneurship

This section explores how the literature defines entrepreneurship and its relationship with human capital development and economic growth (Section 2.5.1), entrepreneurship measurements (Section 2.5.2), entrepreneurship and context (Section 2.5.3) and social and cultural factors (Section 2.5.4). In addition, this section connects the specificities of context (political economy, skill formation, culture, and society) with types of entrepreneurs in Section (2.5.5).

2.5.1. Defining Entrepreneurship

Defining entrepreneurship through reviewing key literature provides a context for exploring entrepreneurship in Oman and discussing its entrepreneurship policy. Despite arguments amongst scholars regarding the precise definition of entrepreneurship (see Wickham 2006), numerous commentators define it as the process of planning, launching, owning and running a small or medium-sized enterprise which is able to offer a process, product or service (e.g. Hatten 2015; Kirzner 2015; Yetisen et al. 2015). This definition has an economic emphasis which fits this study’s main area of enquiry, around the potential of entrepreneurial education to advance economic diversification. Key entrepreneurial characteristics include the capacity and patience to launch, organize, and manage a business venture for the purpose of making a profit (Shane 2003; Schwenbacher and Larralde 2010). Another characteristic, arguably the most important one, is the willingness to take risks. Gibb (1987) added more attributes, such as persuasive powers, initiative, independence, creativity, and problem solving.

Furthermore, some research does not restrict entrepreneurship to “the mere creation of business” but describes it as “a perspective” that can be developed in individuals and exhibited in profit or non-profit enterprises and non-business activities (Kuratko and Hodgetts 1992, p. 4). Schumpeter (2013)¹⁷ defined an entrepreneur as one who is willing and able to convert a new idea or invention into a successful innovation. This also distinguishes entrepreneurship from self-employment, or working for him/herself in a

¹⁷ One of the first scholars who studied entrepreneurship.

business or as a contractor (Parker 2004). Innovation is often considered a feature that distinguishes an entrepreneur from a businessperson (Chell 2001; Veeraraghavan 2009; Morris et al. 2010; Drucker 2014) or a self-employed person (Parker 2004). Section 2.6.4 explores more entrepreneur types, traits, and characteristics.

One notion of entrepreneurship extensively discussed in the literature is public entrepreneurship. Windrum (2008) defined it as having creativity and innovation in the public sector and concluded that both public and private sector entrepreneurs share many entrepreneurial skills and traits, particularly innovation, creativity, risk-taking, and control of locus.

There is an absence of discussion around political, social, and public aspects (e.g., establishing businesses for charity or for supporting a political party) of entrepreneurship in Oman's policy documents despite these aspects being widely examined in the literature (see, for example, Cohen 2012; Assmo and Wihlborg 2016). A review of entrepreneurship documents from other countries and regions (e.g., European Commission 2018) shows that there are mainly economic purposes except in the case of the so-called policy (or political) entrepreneurship/entrepreneur¹⁸, who is concerned with entrepreneurial activities for the aim of winning an election (Cohen 2012, p. 6). Whilst this type of entrepreneurship has emerged in liberal and democratic contexts, e.g., the USA (Mintrom 2000) and Western Europe (Corbett 2003), it does not exist in Oman. In this rentier state context, anything associated with politics is controlled by the State (and indeed the ruler) itself (Valeri 2009). The rentier state context gives little space for any public policy participation or political entrepreneurship (Beblawi and Luciani 2015).

As for the relationship between entrepreneurship and the economy, many studies (for example, Audretsch et al. (2015); Fritsch and Wyrwich (2016) and Malecki (2018)) show evidence of a connection between enhancing entrepreneurship and SMEs and the creation of jobs and developing national economies. For example, in South Africa, SMEs account for about 91% of formal business organisations, contributing 51-57% of the GDP and providing almost 60% of the jobs (Kongolo 2010). In China, 77.3% of the working population is employed by SMEs, which account for 99% of the total number of businesses (Berrell et al. 2009). In the UK, SMEs embody 99% of businesses making up around 60% of private sector employment (UK Parliament 2018), while in the US, over 99% of firms classed as SMEs, creating two-thirds of all new jobs (Shi and Li 2006).

International entities such as the European Union (EU) and the Organisation for Economic Co-operation and Development (OECD) also recognise the significance of

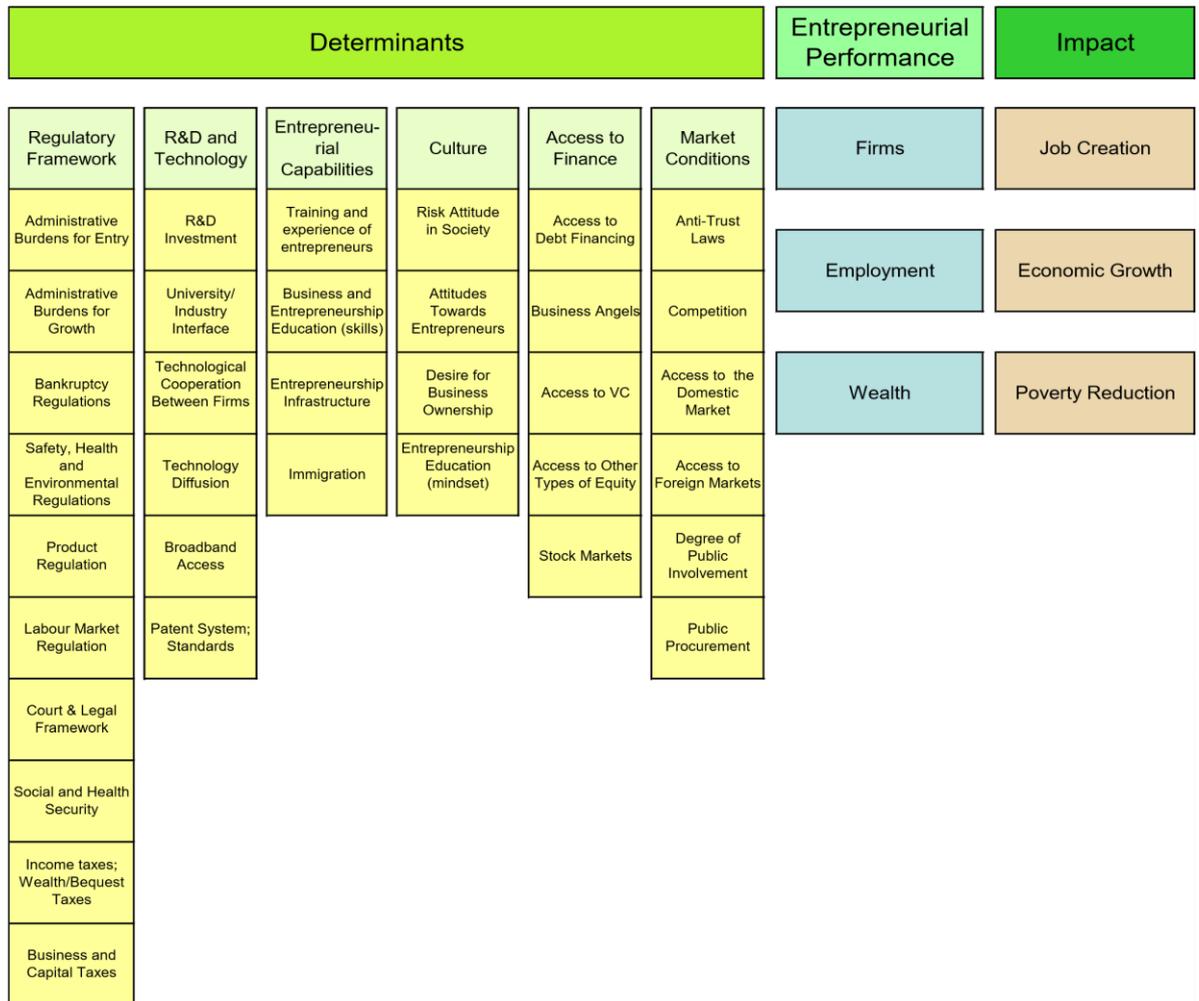
¹⁸ A policy entrepreneur is a person who exploits opportunities to influence policy outcomes to increase his/her self-interests (Kingdon 2003).

entrepreneurship. The type of policies and regulations formulated at the national and international levels (Gartner 1985; Burns 2008) are crucial for enhancing the entrepreneurial environment. The European Commission's Entrepreneurship 2020 Action Plan includes three strategies: (1) developing entrepreneurial education and training, (2) removing existing administrative barriers and supporting entrepreneurs in crucial phases of the business lifecycle, and (3) reigniting the culture of entrepreneurship in Europe and nurturing a new generation of entrepreneurs. The first strategy calls on the Commission and member states to invest more in this type of education and embed entrepreneurship into curricula at the higher and adult education levels, with more emphasis on primary and secondary education. The second strategy includes actions such as facilitating easy access to financing, supporting entrepreneurs during the business life cycle, adopting a better approach to bankruptcy, offering a second chance for failed entrepreneurs, and implementing simpler and clearer rules and regulations (European Commission 2019b). Finally, various reports (see European Commission 2019a, OECD 2019a, 2019b) regard social and cultural factors as vital environmental drivers for individuals to either choose or reject entrepreneurship as a career pathway. The following section explores the OECD entrepreneurship framework as one influential example of measuring entrepreneurship.

2.5.2. Measurement and Indicators of Entrepreneurial Activities

Entrepreneurship is measurable just like other concepts, such as GDP, which measures the value of what is produced (Ahmad and Hoffmann 2008). Of course, measurement of GDP and other concepts and outputs (knowledge economy, productivity, performance, human capital) is fraught with difficulties (e.g. Wolf, 2004; Grugulis and Stoyanova, 2011). The OECD/EUROSTAT (2008, p.4) introduced a framework to entrepreneurship indicators underpinned by the notion that entrepreneurship has broader meanings beyond SME start-ups or self-employment. This framework is based on three interconnected pillars: "determinants", "entrepreneurial performance", and "impact". Ahmad and Hoffmann (2008, p.6) described this framework in a simple way. Passengers (who are policymakers) want to get from A to B on time, which represents policy aims or "impact". These passengers choose certain means of transport (which have different costs and variants). These represent "Determinants" in the framework. During the journey, passengers are kept updated with the correct directions via GPS and speedometer readings which represent "Performance Indicators". According to Ahmad and Hoffmann (2008), each policymaker wants to achieve certain impacts (or different passengers want to go to specific destinations) by choosing to use a determinant (or a mode of transport) based on their needs.

Figure 2.1 OECD/EUROSTAT Framework for Entrepreneurship Indicators



Source: (OECD/EUROSTAT 2008, p.4)

This thesis argues that by implementing the EEP, Oman has chosen “Entrepreneurial Capabilities” as the “Determinant”, specifically “Business and Entrepreneurship Education (Skills)”. The aim or the “impact” is to achieve the economic objectives which lead to job creation (i.e. Omanisation) and economic growth (i.e. diversifying the economy) according to the framework¹⁹. However, this thesis questions whether using this ‘Determinant’, an EEP, can lead to the desired policy objectives in the absence of several other determinants highlighted as relevant in the framework.

2.5.3. Entrepreneurship and Context

Entrepreneurship research is a broad and diverse field, but a particular focus of many studies is on the importance of contextualising entrepreneurship – as a means to advance entrepreneurship theories and studies (Welter and Gartner 2016; Welter et al.

¹⁹ Poverty alleviation is not included in this thesis as poverty rates are expectedly low in Oman. However, no statistics were found to prove this.

2019; Wadhvani et al. 2020). The importance of contextualising entrepreneurship emanates from previous discussions, which have tended to narrow the context of entrepreneurship to a limited number of factors, e.g., focusing on a specific gender (male entrepreneurship) in limited industrialised contexts for the single purpose of generating profits (Welter et al. 2019). The consequence is that understandings of entrepreneurship remain inadequate and underdeveloped (Welter et al. 2019). Indeed, according to Welter and Gartner (2016, p.156), entrepreneurship is about variation and in that sense, characteristics of entrepreneurs makes more sense when they are linked to the “entrepreneurial situations” which vary from one context to another (see Section 2.5.5). Therefore, in order to fully understand entrepreneurship, it is important to acknowledge its “diversity, heterogeneity, and multiplicity” across not only context but different context(s) (Welter and Gartner 2016, p.156) .

The importance of contextualising entrepreneurship is recognised here, as is the complex nature of providing such understandings. Such understandings require an examination of the subjective facets related to recognising and determining contextual differences in terms of, place (spatial), history, change, culture, society, gender, institutions, policies and so on – anything that distinguishes entrepreneurship in one context from another (Welter and Gartner 2016; Welter et al. 2019). In particular, Welter et al. (2019) recommended to study broader economic and social contexts of entrepreneurship and this thesis adds a new spatial facet of contextualising entrepreneurship within the political economy of skill formation system in a rentier state context (see Chapter 8).

Despite an increase in the number of countries studied in recent years²⁰, understandings of the impact of context on entrepreneurship in developing rentier-state economies such as Oman, has been given scant attention. Rentier states include several countries that rely on energy revenue for their national income. In the Middle East, these include the six Gulf Cooperation Council (GCC) States²¹, in addition to Iran, Iraq, and Libya; in Latin America, Venezuela and Ecuador are indicated; and in Africa, they include Nigeria, South Sudan, Gabon, Ghana and Uganda (Anderson 1987; Beblawi 1990). Such countries deserve further investigation and engagement within the comparative entrepreneurship literature. A study by Vahidnia et al. (2019), examining Middle East context, found that there were some similarities and differences of entrepreneurial

²⁰ In a recent study by Terjesen et al. (2016) consisting of a systematic review of comparative international entrepreneurship research, 259 articles published between 1989 and 2010 were analysed. It was found that 66% of the literature reviewed consisted of studies conducted in developed countries.

²¹ Saudi Arabia, Kuwait, Qatar, Oman, the UAE, and Bahrain

“cognitions”²² among these countries. This thesis makes a further contribution to elucidate on entrepreneurship in relation to Oman.

Given that this thesis examines human perceptions of a ‘new’ phenomenon of entrepreneurship in Oman, context is important because it serves as “a cognitive map” for understanding these perceptions (Welter and Gartner 2016, p.22). A ‘cognitive map’ can take the form of the past experiences of the individual, which makes him/her understand a new phenomenon and create certain attitudes in relation to it. The problem of cognitive maps, however, is that they may not be accurate because humans are not good in adjusting their perceptions to change (Welter and Gartner 2016). This thesis examines contextual factors, such as social and cultural factors, on stakeholders’ understandings and attitudes to changes desired by policy makers – for expanded entrepreneurship (Chapter 6).

A further consideration here is history. This thesis studies the historical background of Oman’s economic plans helps to understand the present need for entrepreneurship. This thesis discusses how Oman has approached entrepreneurship as a skill formation strategy to diversify the economy (see Five-year Plans in Chapter 3), and does so by reflecting on its past and current development. Studying history (and place) helps to contextualise entrepreneurship by observing the dynamics and unprecedented ways as a result of changes in technologies, organisations, markets and societies which transform the world (Wadhvani et al. 2020). Studying the past of these dynamics helps to understand how entrepreneurship is understood and shaped across different contexts at present. Most importantly, history allows to systematically study sequences and processes of change over a period of time, particularly in the structure of the economy (Welter and Gartner 2016). However, one drawback of studying history is that it cannot eliminate the uncertainty which is associated with entrepreneurship (Wadhvani et al. 2020). The following section discusses society and culture as key facets of contextualising entrepreneurship.

2.5.4. Society, Culture, and Entrepreneurship

Highlighting the significance of culture and society contributes to the understanding of the contextual factors that underpin entrepreneurship development. This sets the stage for examining how Oman’s social and cultural specificities influence the prevalence of entrepreneurship and identifies the type of entrepreneur which may best fit them. In order to explore cultural and social factors, Hofstede’s six cultural dimensions theory is discussed in Chapter 4 in relation to the adoption of theory-based and data driven

²² Cognitions such as resources access, opportunity motivation, tolerance, venture knowledge (see full list in Table 3 on page 5 in Vahidnia et al. 2019).

approaches in the analysis. Hofstede's theory is a cross-cultural framework which is used to study the effects of culture and society on examined values and behaviours using factor analysis. I used two cultural dimensions, uncertainty avoidance and individualism, out of six (as explained in Chapter 6)²³.

Most other studies emphasise the significance of society and culture on understandings of and growth in entrepreneurship (see for example, Gibb 1993; Hayton 2002; Lee et al. 2017). These studies have looked at the importance of factors such as the degree of uncertainty avoidance and individualism and the impact of family. However, these studies have not examined the significance of these factors in rentier states, a gap this research seeks to bridge, as discussed in Chapter 6.

Wennekers et al. (2001, p. 22) found that low 'uncertainty avoidance'²⁴ societies, are likely to be characterised by large numbers of small businesses and widespread entrepreneurial activity. Such low uncertainty avoidance can be associated with advanced capitalist countries, including LMEs and CMEs, and even developmental states such as Singapore, with high levels of entrepreneurial activities.

On the other hand, not all advanced capitalist countries with low uncertainty avoidance have high levels of entrepreneurship. A study conducted by Wennekers et al. (2007, p.133) across 21 Organization for Economic Co-operation and Development (OECD) countries found that countries such as Japan and France²⁵ with high per capita Gross Domestic Product (GDPs) and low uncertainty avoidance have low levels of entrepreneurship. This suggests that low uncertainty avoidance is one contextual element but also that there are other critical elements which underpin entrepreneurship.

A study by Kiggundu et al. (1983) found that specific economic and political systems could explain different types of entrepreneurial behaviour and their effects in developing countries. Most of these developing countries²⁶ have lower-incomes (except the six high-

²³ The original theory included four dimensions which are: Power distance (related to studies in human inequality issues), uncertainty avoidance (related to unknown future which leads to social and psychological problems such as stress), individualism versus collectivism (related to problems of individuals integration into primary groups) and masculinity versus femininity, (related to the separation of emotional roles between males and females). Two dimensions were added later: Long term versus short term orientation(related to the choice of focus for people's efforts: the future or the present and past, and indulgence versus restraint (related to gratification versus control of basic human desires related to enjoying life) (Hofstede 2011, p.8).

²⁴ Uncertainty avoidance is a society's ability to tolerate ambiguity and uncertainty. Uncertainty avoidance is one of Hofstede's six cultural dimensions (see Table in Hofstede 2011, p.11), which measure why some business practices work better in some countries than in others (Dorfman and Howell 1988).

²⁵ France is "statist" and Japan has "segmentalist" skill formation systems (Busemeyer and Trampusch 2012, p.12)

²⁶ A few developing countries are exceptions, including GCC nations, which have high incomes (see the following Chapter).

income Gulf states) and thereby less financial support for entrepreneurship. Thompson (2008) assumes that social entrepreneurship is non-profit, often associated with the voluntary sector and societal advancement. Abu-Saifan (2012) differentiated between classical business entrepreneurship and the social, as the former seeks profit while social entrepreneurs work to transform society into better state of well-being. Furthermore, social entrepreneurship still shares the same agenda of starting, owning and running a business, being innovative, and taking risks. Given that social entrepreneurship concerns advancing society, the risk-taking factor is lower than in business entrepreneurship, which is undertaken to generate income to live on (Elkington and Hartigan 2008).

Furthermore, some studies examined the impact of family on entrepreneurship. For example, Hahn et. al (2019) found that parents' being entrepreneurs has an impact on students taking a compulsory EE course at university. Another study by Bird and Wennberg (2016) found that family members can influence their relatives to remain in or exit from entrepreneurship. This thesis focuses on the impact of family members on entrepreneurship understandings and engagement. Moreover, western ideas of entrepreneurship are mainly based on the neoliberal values of individualism and competitiveness (Morris 2001), which do not entail much family support. However, family ties remain strong among transnational entrepreneurs migrating from developing countries in Eastern Europe to developed neoliberal countries in Western Europe (Verzhinina et al. 2019), for instance.

Some studies, e.g., Audretsch et al. (2007) found that religions shape people's intentions to become entrepreneurs. Religions such as Islam and Christianity, are conducive to entrepreneurship, and Hinduism, inhibits entrepreneurship (Audretsch et al 2007). However, Henley (2017, p. 611), examining forms of Christianity, argued that there are mediating influences such as individual psychological factors, local entrepreneurial networks, and official regulations which determine if religion can act as "environmental munificence" for entrepreneurial activities.

Fayolle and Gailly (2015) identified an impact of friend as a likely influential on entrepreneurship intentions of HE students -in addition to job experience and family or close relative. Furthermore, a study by Field et al. (2016), examining gender gaps in entrepreneurial success in India found that women who trained with a friend were more likely to conduct a business activity post-training. Overall, research which specifically investigates the impact of friends and friendship on entrepreneurship is scant.

Finally, a study by Hanson (2003) suggests that where people live plays a major role in their decision to start a business and manage it well. More people starting-up businesses

in certain geographical spot, whether urban or rural, encourages others to start businesses (Hanson 2003). To sum up, according to the literature, a range of cultural and social factors are important for entrepreneurship development. This importance varies and stimulates certain entrepreneurship forms depending on the context. The following section explores entrepreneur types and links them with cultural and social contexts.

2.5.5. Types and Characteristics of Entrepreneurs

The purpose of this section is to present a set of entrepreneur types and characteristics and link them to their respective socioeconomic contexts. Other literature has done likewise. Veeraraghavan (2009) linked entrepreneurs with their contexts, arguing that entrepreneurs are part of economic systems. Stevenson and Jarillo (2007) saw entrepreneurship as a process, not an attribute. Exploring this literature will set the stage to discuss Oman's preferred entrepreneur type, based on its entrepreneurship policy, and explore its fit with its political economy, society, and culture (see Chapter 8).

First, there are general characteristics that apply to entrepreneurs generally and distinguish them from non-entrepreneurs. The first trait is risk-taking which scholars, e.g., Knight (2006), Burns (2008) and Çakır and Yaman (2016) put greater emphasis on it as key entrepreneurial trait. Relevant to risk-taking is risk-bearing, which is the ability to accept business failure (Carland et al. 2002). Other key characteristics were identified by Kuratko (2016, p. 14), including being opportunity hunters, visionaries, independent thinkers, hard-workers, innovators, and leaders. Entrepreneurs should also be resourceful, creative, and optimistic in order to succeed (Kuratko 2016). Others such as Venkataraman (1997) and Shane and Venkataraman (2000) asserted that the entrepreneur is someone who is alert to opportunities provided by the market. Other basic traits are being proactive, creative, a catalyst for change, innovative, motivating, a critical thinker, and a problem solver (Wickham 2006; Burns 2008). Noticeably, the above entrepreneurial characteristics are not limited to the ability to create ventures and profits, that is, not all entrepreneurs are business owners and vice versa (Kirby 2004; Wickham 2006). For instance, social entrepreneurs start enterprises not only for individual financial returns but primarily to solve social or cultural issues (Dees 2017). Table 2.1 below shows the key entrepreneur types and their characteristics – as identified in the literature.

Table 2.1 Entrepreneurs Types and Key Characteristics

Type	Main characteristics	Scholars
Craftsman	Comes from a working-class background, has a lower level of education and no management experience, and their sources of finance are restricted to personal savings, money from relatives, or friends. Craftspeople tend to create firms which are less likely to grow.	(Smith and Miner 1983)
Opportunist	Has a middle- class background, a broader education, and management experience. He/she has sought new opportunities, develops more innovative and more diverse strategies, delegates more, is proactive, and uses many sources of financing. Opportunists tend to create adaptive firms. Firms of opportunistic entrepreneurs have higher growth rates than those of craftsmen.	
The inventor-entrepreneur	Has a certain craftsman- orientation with a high priority placed on product development and patent production.	(Miner et al. 1992)
Prototypical entrepreneur	Alert to business opportunities regardless of resources currently controlled, he/she is innovative and uses a variety of financing sources. He/she is a high-profile image-maker and strives to be the best. He/she constantly tries to modify the environment and create situations which result in change.	(Chell et al. 1991)
The quasi-entrepreneur	This type is similar to an entrepreneur but does not have all the characteristics of an entrepreneur. For example, she/he is less innovative and proactive.	

Sources: (Filion 2000; Rauch and Frese 2000; Dincer et al. 2011)

Much of the recent literature focuses on two entrepreneur types: craftsmen and opportunists (Markantoni et al. 2014). Craftsmen usually come from “a blue collar background” and have a low level of education and managerial experience (Schindehutte et al. 2015). Their preference is for technical jobs, and their motivation is derived from their need for personal autonomy rather than organisational or financial success (Soininen et al. 2013). In contrast, higher levels of education and broader experiences characterise opportunist entrepreneurs (Smith and Miner 1983). Olssen and Peters (2005, p.131) argued that HE expansion policies are very common on the neoliberal agenda for the purpose of creating a specific type of entrepreneur, the “competitive entrepreneur”. This type fits in countries which are moving from classical liberalism, which limits State intervention, to more neoliberal systems allowing for greater State involvement (e.g. manipulation of market mechanisms).

As discussed in Chapter 3, the opportunist entrepreneur type is in line with Oman's goals of economic diversification. This type usually has a first degree and can generally develop entrepreneurial characteristics, behaviours, and skills through an education programme. The following section discusses extant literature on EE.

2.6. Entrepreneurship Education

This section first defines EE and its significance according to the literature (Section 2.6.1) and then sheds light on the political and economic context of this education (Section 2.6.2). It provides an introductory overview of Oman's EEP. Finally, Section 2.6.3 sheds light on three countries' approaches to EE, which can then be compared to Oman's EEP (Chapter 8) and from which recommendations can be drawn in Chapter 9.

2.6.1. Education and Entrepreneurship Growth

Most studies define EE as a type of education (at any level of study, from primary and secondary through tertiary education) providing knowledge, skills, positive attitudes (motivation), and desire to conduct entrepreneurial activities such as start-ups and businesses (O'Connor 2013; Walter and Block 2016; Fiore et al. 2019). Although in the past it was thought that entrepreneurship cannot be learned as entrepreneurs are born (Vesper 1974), the debate's focus has shifted from whether entrepreneurship can be taught to the efficacy of different forms of teaching it (Matlay 2005; European Commission 2013; Noyes 2018). Lately, some research studies, e.g., Martin et al. (2013), Sánchez (2013) and Fayolle and Gailly (2015) have emphasised the importance of entrepreneurial education and entrepreneurial skills for both individuals and for economic advancement.

The formulation of EE policies by governments is heavily influenced by institutional perspectives, and in this sense shapes entrepreneurial learning outcomes (Xheneti 2017; Secundo et al. 2017). Building on critiques of HCT, which address the limitations of education in producing the intended outcomes, a study by Hahn et al. (2017) argued that EE policy formulation is shaped by students' entrepreneurial experience, the pedagogy of EE, and the national context. The corollary of this is the production of learning outcomes related to entrepreneurship that are specific to that context. Another study by Xheneti (2017) focusing on Albania as a transitioning economy, found that entrepreneurship policy choice and its effectiveness were influenced by the institutional dynamics of context. Examples of these dynamics include the institutional work of actors, and the changes occurring at national and transnational levels due to changes in society and resources. Another example is presented by Secundo et al. (2017, p.465) where a policy of collaborative entrepreneurial learning processes was designed to fit "a

knowledge-intensive enterprises” context in Italy. The study showed how dynamics in that context, such as the incumbent companies and types of learning approaches used in universities, contributed to shaping that policy.

EE is generally seen as useful for developing students’ entrepreneurial skills and intentions at the HE level (Nabi et al. 2017). Nabi et al. (2011) assumed that the rapid expansion of education draws attention to the weak linkage between the function of tertiary education and the business sector. This weak connection creates a gap between purely academic skills graduates often acquire in universities and business-relevant skills they need to be successful entrepreneurs. Entrepreneurial education programmes are seen crucial for filling this gap through enhancing graduates’ entrepreneurial skills, allowing them to solve problems and be flexible, innovative, and adaptable to new situations experienced on the job (Plewa et al. 2015).

Some of the literature found a direct correlation between education level and entrepreneurial success. Michelacci and Schivardi (2015) believed that the chance for individual success in entrepreneurship increases if a person has had education beyond high school. This study, which examines the premium for work, found that entrepreneurs with post-graduate degrees earn more than entrepreneurs with college degrees²⁷. Their higher education level increases entrepreneurial skills and success in gaining income. Other studies concur with this finding that entrepreneurs with a higher level of education present greater knowledge and skills, problem-solving abilities, motivation, and self-confidence (Belso-Martinez et al. 2013).

Some of these studies, e.g., Rideout and Gray (2013) and Zimbhoff et al. (2016), have concluded that entrepreneurial education does not necessarily lead to business creation and that this, in fact, is not entrepreneurial education’s core role. According to them, other non-enterprising outcomes of this education type exist, such as adopting entrepreneurial behaviour in one’s current job or personal utility and satisfaction. Overall, producing entrepreneurial outcomes depends on the effectiveness of EE programmes in involving all stakeholders’ (students, societies, and policymakers) social and economic needs (Fayolle 2018).

In Oman, Al-Harhi (2017) found that some cultural factors such as religious faith support entrepreneurs in Oman but skills, education and infrastructure were lacking based on entrepreneurs’ perceptions only. This thesis examines these factors through not only entrepreneurs but also other key stakeholders (HE students and faculty/staff and

²⁷ This study uses data from of the US Survey of Consumer Finances during the period 1983-2013. Data for around 4,000 households per wave were collected for this study (Michelacci and Schivardi 2015).

policymakers). Although Oman EE policy does not specify the exact number of graduates who should start SMEs, certain policy elements allude to the desired number. First, given that Vision 2040 clearly states that the private sector will be the main employer of HEI graduates (Vision 2040 Office, 2019), it is expected that the majority of the over 23,000 students graduating annually from HEIs (Oman National Centre for Statistics and Information 2018) will join the private sector. The policy states that SMEs are part of the private sector and hence should contribute to Omani employment. However, again, no target number of SMEs is specified. The fact that the EEP is being enforced by the government to be implemented by all 59 HEIs (without exception) is a clear indication that Oman's goal is to graduate as many students with entrepreneurial skills and intentions as possible.

2.6.2. The Political and Economic Context of EE

Section 2.5 outlines three skill formation systems and their strategies for developing entrepreneurship for economic purposes. This section argues that the skill formation system has significance for the shape of EE. Ebner (2010, p. 320) argued that entrepreneurship policies are sensitive to “the specificities of historically rooted varieties of capitalism with their complex institutional set-up,” including education and skill formation policies. It is argued that establishing an effective skill formation system based on an HE expansion policy triggers EE²⁸ (Olssen and Peters 2005). Although this expansion policy can be seen in most countries across different skill formation systems, it varies from one context to another.

For example, HE expansion is lower in CMEs because they have more developed VET and apprenticeship systems. However, that does not mean entrepreneurship and innovation are less prevalent in those countries. According to Dilli et al. (2018, p. 315) “distinct institutional constellations facilitate the emergence of distinct forms of entrepreneurship”. LMEs and CMEs, nevertheless, seem to outperform other world economy types such as Mediterranean Market Economies (France, Italy, Spain and Portugal) and Eastern European Market Economies (Czech Republic, Hungary, Poland, Slovakia and Slovenia) (Dilli et al. 2018) on the performance of entrepreneurship ecosystems in terms of the contribution of entrepreneurship to economic growth and job creation (see Global entrepreneurship Index 2018).

²⁸ Olssen and Peters (2005, p. 313), stated that developing entrepreneurial skills has become key for the future global neoliberal economy “to the extent that higher education has become the new star ship in policy fleet”.

There is little research investigating the relationship between economies trying to transform into “knowledge-based” economies²⁹, and entrepreneurship. Asongu and Tchamyu (2016, p. 101) argued that creating enabling environmental factors (such as ICTs and patent infrastructures) for entrepreneurship growth “can substantially boost most dimensions of the knowledge economy” in Africa. Likewise, Oman’s Vision 2040 policy lists the goal of moving to a knowledge economy through entrepreneurship (see Chapter 3). In what follows, I explore different models of implementing EE. Knowledge of these models will help identify policy or curriculum borrowing³⁰ and the strengths and weaknesses of Oman’s EEP (Chapter 8), as well as recommends ways to improve learning from these models (Chapter 9).

2.6.3. Delivering Entrepreneurship Education

This section discusses selected EE initiatives in EU and OECD countries. The literature indeed shows EE is effective in enhancing students’ entrepreneurial intentions (Vanevenhoven and Liguori 2013) and economic development (Acs et al. 2008). For example, a study by Martin et al. (2013, p. 211) shows that despite heterogeneous results and methodological weaknesses in the studies they analysed, there is a strong relationship between using “academic-focused” EE and training and producing entrepreneurship outcomes.

On the other hand, formal HE education that resembles this study’s EEP (see Chapter 4) suffers from some pitfalls (Gospel et al. 2013). First, it is not seen to reflect employer and market needs as it is not initiated by them; it is driven by the State. That does not mean, however, that State-driven approaches do not provide successful industrial strategies and education systems under certain conditions – this can be seen in Developmental States such as Singapore and South Korea (Woo-Cumings 1999). Thus, many scholars advocate for more engagement by private citizens and business owners in formulating policies (see for example, Gerston 2014) but also the importance of industrial strategies (Rodrik 2004). Another disadvantage is that colleges cannot cope with the rapid development of firms and markets and hence use traditional and out-dated teaching methods and curricula. Finally, college education cannot provide the work experience that employers and labour markets can (Schwalje 2011; Gospel et al. 2013).

²⁹ Brinkley (2006) explained the difficulty of defining it due to the hardship of measuring or quantifying its indicators. Even associating it with knowledge-intensive industries with their high-tech and high skill levels, is not always accurate.

³⁰ Policy borrowing is borrowing an international experience including borrowing the system, its strategies, methods of implementation and its outcomes whereas curriculum borrowing is limited to borrowing teaching/learning material and means of delivery (Raffe and Semple 2011).

This study takes into account these issues when discussing the EEP's implementation across the three study sites (see Chapter 8).

Another effective way to facilitate entrepreneurial growth is through creating "high-growth entrepreneurship" which is based on "picking winners" (Autio and Rannikko 2016, p.42). This approach, which exhibits "a high degree of selectiveness" based on criteria such as individual characteristics and achievement ability, facilitates the growth of new ventures (Autio and Rannikko 2016, p.52). Selecting winners can take place within HE arena across universities campuses but also can be outside HE sector across communities and even borders (Hornsby et al. 2018). Then, these selected individuals are given advantages (e.g., training, funds, and technical support) not only to create high-quality ventures but to help them grow and thrive by helping them commercialise their services and products (Spigel and Harrison 2018). Lehmann and Stockinger (2019) in examining "Excellence Initiative" in Germany, found that there is a positive side effect of the picking winners of the Initiative through enhancing national patent output and attracting funding by industry. This successful picking winners approach can be one of the suggested alternative scenarios for EE policy development (see Chapter 9 and Appendix 11).

EE takes a number of forms and approaches depending on countries' needs, their political economies, skill formation, and educational systems. Noticeably, the vast majority of policies and initiatives link EE to business disciplines despite the distinction between the two, e.g., entrepreneurship is more innovative and creates greater economic impact than traditional businesses (see Wagener et al. 2010). Given that this study examines rentier state context³¹, it is worth shedding light on the UAE successful model of EE in HE sector. According to Saji and Nair (2018) , who examined students and faculty/staff perception on the efficacy of EE programmes, there is an evidence that these programmes have positive effects on students self-perceptions and skills. That is due to the effective implementation of these programmes but also due to external factors such as well-built entrepreneurial infrastructure, e.g., funding availability and entrepreneurs networking (Saji and Nair 2018). Nevertheless, literature which has examined this UAE successful model is scant due to the new introduction of EE in this country.

Therefore, I take a closer look at examples of world leading countries in EE to inform this study's main enquiry. The UK, the USA, and Singapore were chosen for review for three reasons. First, the three study sites researched during the fieldwork for this thesis in Oman borrow teaching materials extensively from the USA and the UK (see Chapter 7).

³¹ Overall, there is scant research of EE in this context.

Exploring these countries' broader approaches helps to investigate if it is appropriate for Oman to borrow from them given the social and economic differences between Oman and these countries. Second, as for Singapore, the Omani government has recently been interested in learning from Singapore's successful experience (Oman Ministry of Foreign Affairs 2018). Third, including comparisons which describe differences and similarities across international contexts enhances understandings of the Oman context. In essence, being aware of these advanced international practices, helps to provide informed critique of Oman's new initiative and learn from these practices (see Chapter 9).

2.6.3.1. The UK Model

Clearly, the UK's HE skill formation system and its skill strategies (see Section 2.5) endorse entrepreneurship. First, since the UK initiated the "QAA's Enterprise and Entrepreneurship guidance" policy in 2012, there have been initiatives to support it. For example, Enterprise and EE³² has been recognised as a subject discipline within the Higher Education Classification of Subjects (HECoS) coding system that replaced the Joint Academic Coding System (JACS) in autumn 2019. All English and Scottish universities have started implementing eight actions to increase the availability of Enterprise and EE in HE by increasing the number of "student start-ups" and student and staff engagement in entrepreneurial activities (The Quality Assurance Agency for Higher Education 2012, p. 5). In Wales, the Welsh Government initiated the 'Youth Entrepreneurship Strategy' and the 'Big Ideas Wales' government-funded teacher training programmes for all education levels (Welsh Government 2015). The 'Think/Create/Innovate' Education Action Plan became part of the 2014-25 Innovation Strategy for Northern Ireland (Northern Ireland Government 2014). The strategy aims to build an economy "characterised by a sustainable and growing private sector, where a greater number of firms compete in global markets and there is growing employment and prosperity for all" (Northern Ireland Government 2014, p.1)

As an attempt to unify the efforts to promote enterprise and entrepreneurship across universities, the UK established The UK National Centre for Entrepreneurship in Education (NCEE) in 2004. However, entrepreneurship and enterprise practices vary from one university to another. As such, whereas Oman uses a national central policy (see Chapter 4), the UK does not have such policy. Table 2.2 shows examples of various

³² There is a distinction between the terms of Enterprise and EE in England and Wales. In England, Enterprise Education is about equipping students with 'an enhanced capacity to generate ideas and the skills to make them happen', whilst EE is about equipping students with knowledge and skills in the context of starting a new business or venture (The Quality Assurance Agency for Higher Education 2012, p. 2). In Wales, the definitions of enterprise and entrepreneurship education are swapped.

initiatives across UK institutions. In addition to the national centre for the UK, which is the main national centre, other universities' initiatives were selected to show the disparity of delivery across British universities.

Table 2.2 Examples of UK Entrepreneurship and Enterprise Initiatives

Institution	Period covered	Initiatives
The National Centre for Entrepreneurship in Education	- 2004 to present	<ul style="list-style-type: none"> - Entrepreneurial University leaders programme and award - MA in enterprise and entrepreneurship - International Entrepreneurship Educators Conference - National Enterprise Award
University of Huddersfield	- 2015 to present	<ul style="list-style-type: none"> - Includes enterprise education as one of its six key themes in its "2015-2018 teaching and learning strategy - Created the Entrepreneur FACETS Framework and the Bolton Thompson Entrepreneur Indicator - Embeds enterprise education in curricula beyond business schools and sets up support systems for academics new to the topic
Centre for Enterprise and Entrepreneurship Studies at University of Leeds	- 2014 to present	<ul style="list-style-type: none"> - Offers credited undergraduate modules as electives - Embeds aspects of entrepreneurship and business in various undergraduate degrees - Offers full-time and part time master's and PhD degrees in enterprise and entrepreneurship
University of Swansea	- Start date is not available but it is ongoing	- Teaches one of the only courses of its kind in the UK, the BSc Business Management (Entrepreneurship)
Cardiff University	- Start date is not available but it is ongoing	- Offers an undergraduate course entitled "Starting up a Business / Social Enterprise" and a master's degree entitled "Communication Technology and Entrepreneurship"

Sources: (Cardiff University 2017; University of Leeds 2017; The UK National Centre for Entrepreneurship in Education 2017; University of Huddersfield 2017)

In Oman, while the EEP is mandatory for all undergraduates, each HEI can design its own version of the EEP. In the UK, on the other hand, some institutions offer entrepreneurship courses, including undergraduate (Swansea University) and post-graduate levels (Cardiff University), or as an elective (University of Leeds), whereas other HEIs do not, and the government does not require them to do so.

2.6.3.2. The U.S.A Model

The United States is not only a pioneer but has been making significant advancements in EE (Finkle et al. 2006; Nieuwenhuizen et al. 2016). This is due to government recognition of the benefit of this education to both the HE sector and the economy (Lee et al. 2005). The skill formation system in the USA, which embraces general skills, seems to provide an encouraging environment for entrepreneurship (Henry et al. 2017). Associated with this environment is also the huge size of the American economy, its free-market nature, its long implementation experience (particularly in higher education institutions), the antecedent recognition of this education's value and hence generous support for it (Thelen 2004), and finally the individualistic characteristics of American society (Bazzi et al. 2017). Due to these contextual specificities, there is a greater variety of EE approaches there than elsewhere. Table 2.3 below provides some examples that illustrate the breadth of different practices in the USA.

Table 2.3 Examples of USA Entrepreneurship Education Initiatives

Approach	Period Covered	Institution	Examples of Activities
Compulsory or elective multi-disciplinary programme	2016 - present	Lake Erie College	Taking it alongside other majors exposes students to specific entrepreneurial activities for engineering, businesses, etc.
Entrepreneurship programme is part of all or some of the courses	For more than 60 years and ongoing	University of Miami	Conducting extensive readings, case studies, guest speakers, and independent research
Entrepreneurship programme incorporated within curricula	For more than 50 years and ongoing	Babson College	Learning how to start and commercialise small businesses and using technology in a hands-on, collaborative environment to find innovative solutions.
Business major or minor	Start date unavailable but ongoing	Washington University, St. Louis	Exposing students to the entrepreneurial free-market experience of founding or purchasing a business while at school
Certificate in entrepreneurship for all university majors	Start date unavailable but ongoing	North Carolina A&T State University	Exploring entrepreneurship career option, examining the entrepreneurial process and the skills needed for entrepreneurial success. Applying the knowledge and skills through the Entrepreneurial Internship Programme

Sources: (Sarasvathy 2001; Streeter et al. 2002; Nieuwenhuizen et al. 2016; Babson College 2018; Miami Business School 2018; North Carolina A&T State University 2018; Olin Business School 2018)

Similar to the UK case, the USA does not have a national policy that requires all HEIs to follow a certain approach in EE. Rather, the large HE sector of the USA allows a wide range of approaches. Nonetheless, Mandel and Noyes (2016, p.164) argued that “Experimental Entrepreneurship Education”³³ is a widely used mode of delivery in the top 25 entrepreneurship schools due to its potential to replicate uncertainty in going through business processes and identifying and evaluating opportunities. A similar method is “Entrepreneurial Action Through Prototyping” which also engages students in hands-on

³³ In contrast with lecture-based or case-based methods, this method engages students in real life experiences, allowing them to make decisions, identify opportunities, and reflect on the process (Mandel and Noyes 2016)

action-oriented activities (Noyes 2018, p. 118). Noticeably, these two successful methods are based on practical experience (Chapter 7 discusses Oman's EEP).

2.6.3.3. Singapore Model

There has recently been substantial growth in EE³⁴ across universities and institutes of higher education in Singapore (Ho et al. 2014). This can be attributed to the recent desire to establish a State-led innovation-driven knowledge environment. This shift is the main driver for EE and is one developmental model feature (Woo-Cumings 1999), in particular because the private sector is inexperienced in this new field of entrepreneurship and SMEs (Sidhu et al. 2014). The government-run National Institutes³⁵ of Higher Learning, such as Nanyang Technological University (NTU) and National Institute of Education (NIE), are taking the lead in equipping students with entrepreneurial skills. Other quasi-governmental bodies (supported by the government and managed privately) provide this education for those who are employed or have left full-time education (see Table 2.4).

Table 2.4 Examples of Singapore Entrepreneurship Education Initiatives³⁶

Institution	Period Covered	Initiatives
International Enterprise (IE) Singapore	1983 - present	Mainly supports business internationalisation
SPRING Singapore	1996 - present	Supports SMEs and Start-ups
The HEAD Foundation and the Human Capital Leadership Institute	2013 - present	Provides talent programme in Southeast Asia, including talent entrepreneurs
Singapore Institute of Retail Studies (SIRS)	2016 - present	Provides a variety of entrepreneurship courses up to the management level

Sources: (SPRING Singapore 2016; The HEAD Foundation 2017; Enterprise Singapore 2018; SIRS Singapore 2019)

There are various ways of delivering EE in Singapore. For instance, there are on campus programmes (see Souitaris et al. 2007), experiential programmes (see Vanevenhoven 2013), and learn-by-doing programmes (see Rasmussen and Sorheim 2006).

³⁴ EE is not new given that it has been offered since the late 1980s in the National University of Singapore (NUS), one of the key universities in Singapore (Nieuwenhuizen et al. 2016, p. 532).

³⁵ The Institute of Technical Education (ITE), Nanyang Polytechnic (NYP), Nanyang Technological University (NTU), National Institute of Education (NIE), and the National University of Singapore (NUS).

³⁶ The tables showing examples for the three models do not follow the same format because they only show different approaches to EE and are not meant to be compared.

Singapore's recent experience in the provision of EE shows that government agencies are the main provider. A wide variety of activities (traditional lectures, seminars and business plan competitions) are offered to students from any faculty. For example, the National University of Singapore (NUS) has introduced innovative entrepreneurship experiential learning through its overseas internship programmes in which students complete an internship with a high-tech start-up while attending entrepreneurship programmes at partner universities. Furthermore, implementing entrepreneurial initiatives goes beyond the classroom to the entire community, mostly through State initiatives³⁷.

Finally, Singapore is moving forward to encourage more entrepreneurship in the future. The 2016 Committee on the Future Economy Report includes seven strategies, all of which emphasise enterprise and entrepreneurship skills. For instance, strategy two outlines the necessity to facilitate the acquisition of "deep skills", which include enterprise skills (Singapore Future Economy Council 2017, p. 6). Enterprise skills are mentioned in strategy three, entitled "Strengthen enterprise capabilities to innovate and scale up" (Singapore Future Economy Council 2017, p. 7). Although the report states that there has been a shift from globalization to more protectionism in the West, Singapore aims to continue with more internationalisation and openness to foreign collaboration, another developmental state model feature (Woo-Cumings 1999). This policy also includes 'enterprises,' as stated in strategy three (Singapore Future Economy Council 2017, p. 7).

To sum up, despite the fact that the literature tends to cluster countries into typologies or categories to simplify understandings of complex arguments, it is clear that each country has its own distinguishing characteristics due to its specific political economy and skill formation system. This explains why countries have adopted certain forms of EE and have attempted to stimulate the development of certain types of entrepreneurship which fit its context and needs, as discussed in Section 2.6.3. First, in the UK, general entrepreneurship programmes, especially in existing departments and to some extent in a few centres or institutes scattered in different HEIs, are what create the UK's common form. These centres work as a common vehicle for providing a range of programmes and services usually based in a business school (Nieuwenhuizen et al. 2016).

³⁷ These include the Annual National Business Plan Competition, Technopreneurship Minor Program, which targets undergraduate students, and the Innovative Local Enterprise Achiever Development (iLEAD), which offers undergraduate students a seven-month local internship and a two-week overseas study visit trip (Ho et al. 2014).

The USA appears to have adopted more advanced forms by not only having entrepreneurship programmes and centres, but it also by establishing departments in HEIs dedicated to innovation and entrepreneurship. They also use significant university resources and act as a home for academics and students in this field, who enrol in large numbers. In his discussion of high skill ecosystems, Finegold (1999) takes Silicon Valley in the USA an example, and identified the importance of HEIs to skill ecologies, particularly for entrepreneurs. He (1999, p. 60), argued that the UK might benefit from its large number of research HEIs to create similar entrepreneurial high-skill ecosystems by providing catalyst to motivate potential entrepreneurs, more supportive environment, “on-going nourishment”, and “high degree of interdependence”.

A unique feature of the USA is the existence of entrepreneurship schools. Although not large in number, these schools represent a dedicated and comprehensive approach by including academics and students from across fields (Nieuwenhuizen et al. 2016a). Singapore has the youngest model among the three profiled in this chapter, yet it has advanced in delivering this type of education thanks to Singapore’s high-quality education system.

It is important to clarify that each country has its own approach to implementing EE and creating entrepreneurs depending on their contextual specificities. The USA has schools of entrepreneurship due to its huge HE sector, its large population, and its liberal economy, the latter of which encourages more market competitiveness. There is also high demand for this type of education. On the other hand, schools of entrepreneurship do not exist in Singapore because of low demand³⁸.

2.7. Conclusion

This chapter provides context for the study by discussing relevant theories and literature and thereby arrives at a set of research questions which present gaps in this literature. The main gap, and hence this study’s main research question, is: **How is the Entrepreneurship Education Programme (EEP) in higher education perceived to contribute to the aim of economic diversification in Oman?** The chapter has discussed how EE can be employed to develop economies in LMEs, CMEs and Developmental States but scant research has investigated EE in the rentier state economy context, and in particular the contribution of EE policies in to diversifying rentier state economies. This main research question necessitates first exploring understandings of entrepreneurialism by EEP stakeholders in this context which the

³⁸ Singapore’s population is 5.5 million and has 34 HEIs compared to the USA, with a population of 327 million and around 5300 HEIs (World Bank 2018).

thesis first sub-question seeks to determine. Then, the second sub-question expands the investigation by exploring the role of the EEP in shaping HE stakeholders' (students and staff) entrepreneurship understandings and aspirations. This chapter has discussed the discourse of investment in education in a developing and transitioning economies, which subsequently, has led to an appraisal of HCT and has highlighted its critiques.

Given that Oman is a rentier state, the chapter explores literature, which discusses the impact of this context on education policies and skill formation strategies. This context is specifically addressed by the third sub-question of this thesis, which examines how Oman's political, economic, cultural and social specificities shape and facilitate i) entrepreneurship understandings, and ii) engagement with entrepreneurialism. The chapter has reviewed different types of skill formation systems, with the purpose of later providing critical assessment and analysis of Oman's approaches to skills development. The chapter also goes on to explore the broader entrepreneurship literature in order to identify types of entrepreneurs that fit certain contexts and skill formation systems. The chapter narrows the discussion by focusing specifically on the EE literature and selected advanced countries' approaches. This identifies a gap in the literature in response to which the fourth sub-question was included in order to examine the likelihood of the EEP, to overcome barriers to entrepreneurship, expand entrepreneurial skills supply and increase the number of graduates who become entrepreneurs.

Three key points can be drawn from this chapter. First, while some studies and theories (e.g., HCT) argue that investment in education may create human capital and boost economic development, other studies argue that despite the importance of this investment it cannot alone harvest the desired economic outcomes. This sets the scene to discuss whether investment in the EEP will contribute to economic diversification in Oman or whether there are broader (contextual) factors that must be considered to achieve this goal.

Second, there is an obvious connection between entrepreneurship and EE policies and political and economic contexts, the skill formation system, and social and cultural conditions when it comes to interpreting the entrepreneurship policy's potential for economic growth. Each contexts' specificities shape different meanings, purposes, and entrepreneurship and entrepreneur types needed for its economic growth. These contextual specificities are taken into consideration while undertaking the empirical part of this thesis which examined Oman's experience implementing the EEP in its HE sector.

Third, EE policy implementation and delivery approaches vary from one context to another. This is due to each country's political economy and skill formation system, which subsequently influences EE policies and the profiles of

entrepreneurship/entrepreneurs. That is, a particular EE programme and skill policy implementation evolves because of a country's individual political economy and contextual social and cultural factors. In addition to these contextual specificities, there are national needs – in this case, diversifying/transforming the economy. The following chapter explores Oman's context and its national needs for transitioning into entrepreneurial and diversified economy.

3. Chapter Three: Skill Formation, Entrepreneurship Education, and Economic Diversification in Oman

3.1. Introduction

This chapter gives a critical account of Oman as a rentier state, including its economy, culture, society, education and skill formation system, and human capital development. Discussing these key contextual factors allows for an analysis of their relationship with entrepreneurship and EE in Oman, and informs later discussions of the study results.

The chapter starts by defining Oman as a rentier state, with an emphasis on national strategic plans, society, culture, and the legal and welfare systems (Section 3.2). The second purpose is to outline its education and human capital development (Section 3.3) and identify its skill formation system in order to discuss how entrepreneurship education is organised. Next, an overview of the relationship between entrepreneurship development and the EEP initiative, the skill formation system, and Oman's desire to diversify the economy is provided in Section (3.4). The final Section (3.5) reviews Oman's approach to cultivating EE as part of a wider skill formation strategy for economic diversification.

3.2. Oman as a Rentier State

The purpose of this section is to define Oman as a rentier state and outline the government's attempts at economic diversification, the goals of which are to increase the number of SMEs owned by the local labour force and promote private sector employment for Omani citizens (Tanfeedh 2017). This is locally known as the 'Omanisation process.' As explained in Chapter 1, Oman is working on building an alternative economy that is more stable and sustainable than the current energy-based economy which has been subject to oil price fluctuations. This effort has recently triggered a trajectory of reinforcing entrepreneurship's contribution to economic diversification and pushing Omanisation.

The scope covers specifically the period beginning in 1970, when a new era dawned for Oman. This was the moment when the former Sultan came to power and oil revenue began to impact the economy positively, leading to the need to increase citizen participation in all sectors of the national workforce and later encourage entrepreneurship.

In such complicated global economic contexts and given that most of the literature focuses on the post-1970 era, it is not easy to situate a relatively young country's economy like Oman's with its small GDP of 81.79 billion US dollars in 2014 (The World

Bank 2016) or just 0.13 per cent of the world economy. Oman is mostly clustered with the other rentier states of the GCC (e.g., Dar and Presley 2001; Escribano 2005; Legrenzi 2011; Hanieh 2015) with their huge surpluses and liquidity that have contributed to massive growth, large foreign labour forces, and unemployment issues (Hanieh 2015).

The fluctuation of oil prices in the mid-1980s and late 90s led all six Gulf states to set economic diversification policies starting in 1999. It also led them to include entrepreneurship in these policies in the 2000s because of their job creation and economic stabilisation potential (Miniaoui and Schilirò 2016). Following the 2014 drop in oil prices, Oman and other GCC countries reduced government spending, raised corporate tax rates, and increased some government service fees. In addition, starting in mid-January 2016, Oman and all GCC countries adjusted petroleum product prices in line with those around the world (Al Alarimi 2016). Continued oil price instability is likely to spur GCC countries, to attempt to diversify their economies and adopt entrepreneurship programmes (Hertog 2010, p. 261). Oman is tackling this with more urgency compared to other GCC nations – see below for further details.

Oman shares many political, economic, cultural, and social similarities with other GCC states. For example, Hvidt (2015) argued that the “rentier mentality” (see Chapter 2 for definition) in all GCC states has led to a lack of motivation to pursue knowledge and entrepreneurship, which is one main obstacle to transforming these countries into knowledge economies (see Chapter 2 for definition). Furthermore, the public sector jobs provided to most GCC citizens, which feature attractive employment and retirement packages, are not necessarily offered based on need but rather for the purposes of wealth redistribution (Hvidt 2015). Moreover, reliance on cheap foreign labour to grow the economy (Al-lamki 2000; Al-Lamki 2005) could have a negative influence on entrepreneurship. In Oman and GCC states, entrepreneurs are more likely to hire expatriates instead of citizens because the government requires a higher minimum wage for citizens (The Times of Oman 2018). Availability of cheap labour is beneficial for small businesses with limited financial ability to pay Omani workers, who require higher wages. This seems to motivate Omani entrepreneurs to start businesses. However, this clashes with one of the EEP’s aims, creating more jobs for Omanis.

On the other hand, there are divergences among GCC states which might impact entrepreneurship. One difference is that Oman’s oil revenues are more modest than those of Saudi Arabia, the UAE, and Kuwait (El-Katiri et al. 2011). This means that the need for economic diversification varies from one GCC state to another. Given Oman’s lower oil revenues and slow economic diversification progress, it is more urgent for it to integrate entrepreneurship into its economic and educational policies and plans. Another

difference is that governance impacts entrepreneurship policy implementation. For instance, in two Gulf rentier states (Qatar and UAE), the autocratic governmental system has provided substantial flexibility in implementing entrepreneurship policies, according to Ennis (2018). No study has examined if this is also the case with Oman – see Chapter 6 for a fuller discussion.

3.2.1. Demographic and Political Structure

Oman occupies a strategic location at the mouth of the Arabian Sea, bordered by the UAE to the north, Saudi Arabia to the west, Yemen to the south, and the Arabian Sea and the Indian Ocean to the east (see map below in Figure 3.1).

Figure 3.1 Oman’s Location in The Middle East



Source: Google Maps 2019

Given Oman’s proximity to Asia, especially the Indian sub-continent, the majority of its expatriates come from these parts of the world. In fact, over 88% of Oman’s foreign population in 2018 was Asian (Oman National Centre for Statistics and Information 2018). These foreign workers have been able to fill the need for cheap labour to support Oman’s rapid socio-economic and infrastructure development (Kabir and Rahman 2012, p. 167). Nonetheless, the large number of foreign workers has created unemployment³⁹ among Omani citizens (Al-Farsi 2013). Oman has identified certain sectors (e.g., tourism,

³⁹ The estimated unemployment rate in Oman was 17% while youth unemployment is approximately 49% in 2017 (The World Bank 2018).

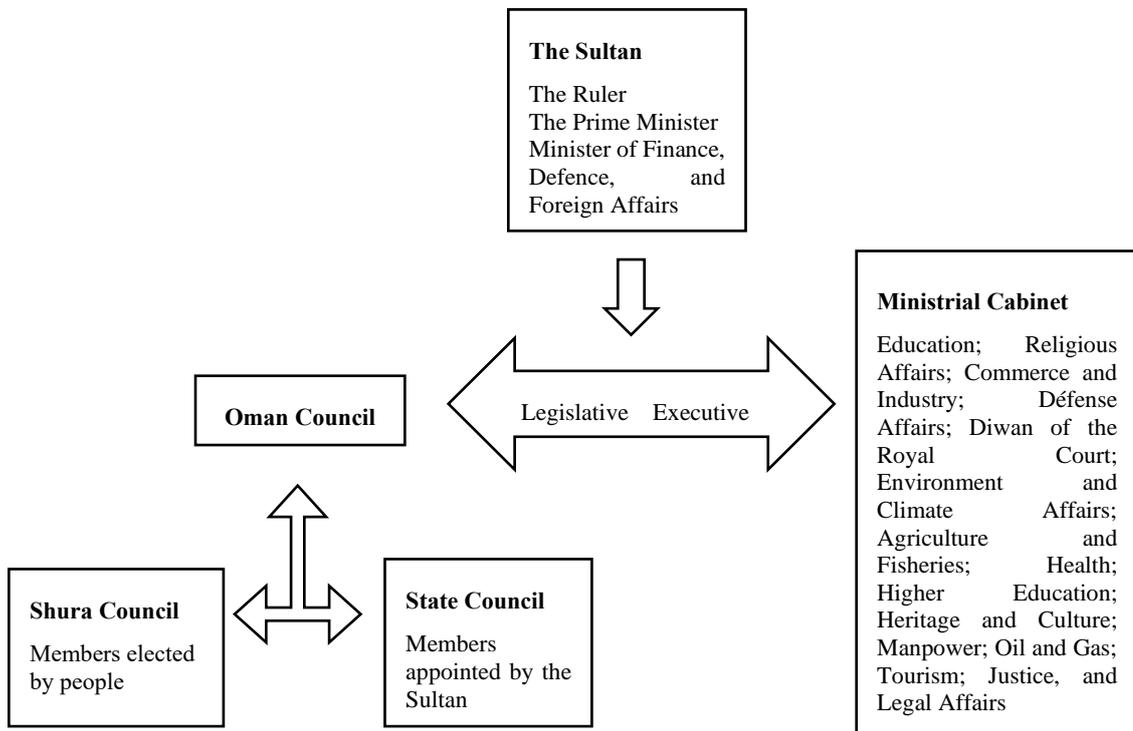
logistics, and transportation) that can function as alternatives to the energy sector and hence has required HE institutions to offer majors in these sectors. The goal of doing this is to provide local labour for these sectors. Entrepreneurship is seen as another pathway for graduates in various majors and particularly who specialised in these sectors to start businesses instead of obtaining salaried positions elsewhere (Tanfeeth 2017). Encouraging Omani entrepreneurs to take over private sector businesses and reduce foreign dominance will also accelerate Omanisation.

The relatively young average age in Oman is one of the fundamental drivers of economic diversification, the Omanisation process, and perhaps entrepreneurship and the expansion of HE. Currently about 54.7% of the population is below the age of 24 (Oman National Centre for Statistics and Information 2019). Foreign labour comprises a large proportion of the population, consisting of around 43.9% (2,022,000) of the total population of 4,602,000 in 2018 (Oman National Centre for Information and Statistics 2019). The increase in expatriates in the 70s and 80s was a normal response to the escalation of oil revenue, which has consequently enabled more domestic industry and the building of infrastructure. It was not possible for Omani workers to do these jobs because they lacked the necessary skills (Birks et al. 1986, p. 799). Nonetheless, because the percentage of expatriates remains high, the country adopted an Omanisation strategy in 1988, as well as a higher education expansion to upskill local labourers and replace expatriates in the private sector. However, not much progress has been made (Al-Lamki 2005). In fact, the HE expansion has created more unemployment and pressure on the government (one of the main demands of the 2011 strike was jobs for HE graduates). Therefore, EE was mandated in 2014 in order to correct the consequences of the rushed HE expansion. The hope is that it will promote more start-ups and accelerate the progress of Omanisation, benefiting from the young population.

Oman's political structure as a monarchic government with an almost total absence of democracy could be a hurdle for economic diversification and the Omanisation process, and thereby for entrepreneurship development. This is because the monarch has supreme and sometimes absolute authority in ruling the country (Beblawi and Luciani 2015). This means that although some typical features of democracies such as openness, public engagement in forming policies, and freedom of speech exist in Oman, they are limited. There is also an absence of political parties (Anderson 1991a; Common 2008). Even the only body with elected members, the Shura Council (see Figure 3.2 below), does not have the authority to make important economic changes, let alone any alteration in the political structure (Al-Farsi 2013). However, a recent study by Kaya (2019, p.1) found that "political change" does not make much difference when a rentier state seeks economic diversification if certain conditions are achieved. These are the

production of profits by non-energy sectors, a shift towards industrialisation, and an attractive environment to invest in non-energy sectors (Kaya 2019).

Figure 3.2 Oman’s Monarchic Political Structure



Source: adapted from (Economist Intelligence Unit 2015)

Figure 3.2 (above) illustrates Oman’s top-down monarchic structure. Executive authority was largely concentrated with the late Sultan Qaboos (as is the case with current Sultan Haitham), “even though he (Qaboos) has a reputation for benevolence and has been considered highly popular” (Katzman 2011, p. 2). The Sultan is the Prime Minister, Minister of Defence, and Minister of Finance and Foreign Affairs. In addition to the Sultan, there is the Council of Oman, whose role is limited to discussing and reviewing policy and government plans. It is thus not a parliament per se and does not legislate, despite recent reforms permitting it to question ministers, for example. Key issues such as the structure of the political system, national security, foreign affairs, and energy are not determined by the Shura, whose responsibility is limited to reviewing and questioning economic plans and the annual budget.

Furthermore, and in contrast with a republican dictatorship, monarchs are typically more responsive to societal demands for economic and political reform (Yom and Gause III 2012). In Oman several major political reforms under the authority of the Shura Council (in addition to economic and social reforms) were announced as a quick response to a 2011 demonstration (see Section 2.2). The measures implemented to satisfy demonstrator demands also included support and funds for entrepreneurship to

contribute to the alleviation of popular discontent. However, high levels of support can create a “comfort zone”, which might clash with entrepreneurship’s risk-taking ethos (Schumpeter 1989). This study examines the entrepreneurial environment post-demonstration and its implication on student attitudes and intentions regarding entrepreneurship.

As discussed in Chapter 2, entrepreneurship flourishes more in LMEs (e.g., the UK and the USA) and CMEs (e.g., Germany) with democratic political structures. However, other non-monarchic and non-liberal countries such as China (a communist republic), (Zhao and Zhang 2017, p. 30) have shown that entrepreneurship can grow well due to positive government intervention as an external factor and “low marginal prices” as an internal factor.

The following section presents Oman’s key economic strategies and visions that focus on diversifying the economy and Omanising jobs, helping explain why entrepreneurship has recently become part of these plans.

3.2.2. Oman’s Economic Status, Visions, and Plans

The purpose of this section is to give a historical timeline (from the 1970s) of Oman’s economic plans and visions, focusing on efforts to change its oil-dependent economy into a diversified one, Omanisation, and the emergence of entrepreneurship in these plans. Oman is classified as a high-income country by the World Bank thanks to its natural resources, rather than its economic diversification plans and efforts. External rents obtained from energy are the main source of national income. The local productive sectors, including industry, agriculture, and manufacturing, are underdeveloped, risking the economy’s long-run prospects. Oman’s oil production reached 959,000 barrels per day in December 2019 which made 85% of total government revenues (Oman Ministry of Oil and Gas 2019). Other non-petroleum industries, such as agriculture, fisheries, and tourism constitute just 15% (Oman National Centre for Statistics and Information 2018). In what follows, I review these economic plans in light of what the government has been doing to push diversification and the Omanisation process, which has achieved only limited progress to date.

3.2.2.1. First Six Five-year Plans and Vision 2020

Economic diversification and the Omanisation process have remained major strategic initiatives since the 1970s. To redress the imbalance in its economic structure, the government has endorsed several five-year plans focusing on strategies promoting the participation of the national workforce in different economic disciplines (Al-Hamadi et al.

2007). These plans are shown in Table 3.1 below, which provides details on the first five five-year plans.

Table 3.1 First Five-Year National Plans

Plan	Main Features	Diversification/Omanisation
First: 1976–80	Establishing the basic infrastructure of the country, e.g. roads, hospitals, schools, and Ministerial head-quarters	Labour nationalisation, particularly in the public sector. About 93% of the entire labour force in civil service consisted of Omanis
Second and Third: 1980-90	Continuation of building basic infrastructure and the beginnings of a focus on building human capital. First university: SQU was founded in 1986	More attention to private sector development, due to the unexpected decline in oil prices In 1980, non-Omani labour exceeded Omani labour for the first time
Fourth and Fifth plans (1990-2000)	Creating policies to promote the employability of Omani citizens in the national workforce	Establishing quota systems by providing more training and education opportunities in various sectors for its citizens than previous plans.
Vision 2020	Strengthening the private sector through continued improvement and privatisation policies for service providers, eliminating the procedural and administrative barriers to private capital entering various production and service sectors	Entrepreneurship and SMEs are regarded key for economic diversification and Omanisation

Sources: (Al-Lamki 1998; Al-lamki 2000; Al-Hamadi et al. 2007; Al-Jamali and Ennis 2014; Jones and Ridout 2015; Matriano and Suguku 2015)

This table shows the main aims which justify the need for more expatriates, e.g., building infrastructure⁴⁰, during the first, second and third plans, along with some efforts to diversify the economy. Then, more policies were created to help achieve the latter in the fourth and fifth plans. This occurred due to the prompt recognition that Oman's oil resources (and Bahrain) were limited, compared to neighbouring GCC countries, who were more fortunate, namely Saudi Arabia, United Arab Emirates (UAE), Kuwait, and Qatar (Hvidt 2013).

⁴⁰ For example, the migration of foreign labour into Oman increased by 83% from 81,250 in 1975, to 148,800 in 1980 (Birks et al. 1986).

Nonetheless, the failure of these plans to address economic diversification and the Omanisation process pointed to the urgent need to explore other alternatives⁴¹, and this included entrepreneurship and SME sector development. This urgency was due to the labour force being mainly composed of expatriates while many Omani citizens are unemployed (Jones and Ridout 2015). Most of these unemployed are young people who live with their parents, which ensured a certain standard of living for them, but long-term unemployment and lack of prospects caused frustration as shown in the 2011 demonstrations. This also posed a serious threat to the economic and social prosperity which the people of Oman have been experiencing (Magd and McCoy 2014). Therefore, in Vision 2020, launched in 1996, most of the main policies and guidelines touched upon economic diversification and the Omanisation process more intensively than before (see Table 3.1). Most importantly, entrepreneurship and SME development were presented as potential new methods that could contribute to strengthening the private sector, and Omanising and diversifying the economy (Matriano and Suguku 2015).

The education sector was a significant part of this vision. The government undertook strategies to develop human resources by upgrading the level of education provided in Oman's education system through HE expansion and promoting educational and vocational training (Oman Ministry of National Economy 1995). Oman's continued emphasis on education throughout all of its economic plans indicates a strong belief in the potential of this sector to develop human capital for the economy (as discussed in Section 3.3.2). This belief in education eventually led to the 2014 development of the EEP primarily to help absorb the increasing number of graduates created by the HE expansion policy into the labour market but also to complement other non-educational initiatives (see Table 3.4) pre-dating it.

3.2.2.2. Seventh and Eighth Five-year Plans (2006-2015) and Vision 2040

These plans started to expand to new alternatives, such Foreign Direct Investment (FDI) and SMEs. To do so, the government worked on establishing free trade zones in the north (Sohar), middle (Duqum), and south (Salalah) of the country. This was reminiscent of the Malaysian model, which relied on FDI to fuel its economic growth in 1971 (Gulam Hassan and Abou Sakar 2013). Consequently, FDI in Oman rose in value from OMR 11.52 billion in 2010 to OMR 12.72 billion in 2011, with an increase in investment flow of OMR 1.19 billion, or 10.4% (The Times of Oman 2013). FDI recorded a sharp decrease of OMR 800 million in 2015 and an all-time high of OMR 2.4 billion in 2018 (Oman National Centre for Statistics and Information 2019).

⁴¹ The other sectors are tourism, logistics, and petrochemicals (Vision 2020).

Major infrastructure projects have been completed, such as in the south of Oman where Salalah International Airport and free trade zone have been established in order to grow Oman's tourism sector (Business Intelligence -Middle East 2006). The increased emphasis on FDI and increased concentration of SMEs continued into the next plan. For example, the expansion of the industrial zones into new areas: Sumail, Al-Mudhaibi and Ibri, thus completing the sixth and starting the seventh stage of the Sohar Industrial Estate (Oman Ministry of Commerce and Industry 2015) has given Omani entrepreneurs more facilities to start businesses in these industrial areas. The work in Duqum Port⁴² and Dry Dock, the largest special economic zone, prioritised mineral, oil-based, and fishing industries and has allowed the SMEs sector to contribute to their development.

The government has begun to prepare for the next Vision 2040. A main committee and six technical committees have been established and have released a preliminary vision document. This time, entrepreneurship has continued to be given a similar amount of, if not more, attention than in Vision 2020, due to its inclusion, in three sections of the preliminary vision document. One objective is to create a "national scheme" for entrepreneurs in order to fulfil a key national priority: "Inclusive Education, Lifelong Learning, and Scientific Research that Lead to a Knowledge Society and Competitive National Talents". Entrepreneurship is also included as one goal under the strategic priority of "Economic Diversification and Fiscal Sustainability". Finally, one statement emphasises the need to finance entrepreneurship to generate employment under the strategic priority of "The Private Sector, Investment, and International Cooperation" (Vision 2040 Office 2019, p.29).

It is clear that these economic and contextual particularities have specific social, cultural, legal, and welfare effects on the people of Oman. They also impact the recent emergence of entrepreneurship as a new societal phenomenon, as the following section details.

3.2.3. Society and Culture, Legal and Welfare Systems

Generally, factors related to culture such as family and religion have more impact than financial factors on people's desire to gain knowledge and skills in Gulf states (Hvidt 2015). According to Hvidt (2015, p. 30) that is because four decades of huge energy revenues have "significantly dampened the effect of economic incentives," making culture more significant. This has also created a welfare system in the form of entitlement

⁴² A port town on the Arabian Sea in central-eastern Oman. The town is currently experiencing significant development and is seen to be contributing in Oman's national income.

to numerous benefits and privileges, which also affects entrepreneurship development (Hvidt 2015).

In Oman, social, cultural and welfare aspects seem to support entrepreneurship on the one hand and limit it on the other. The powerful role of family, tribe, and religion (Valeri 2013) has made Omani society less individualistic (see Hofstede 2011). As discussed in Chapter 2, low individualism undermines entrepreneurship growth. Omanis live in modern family units in a society which can be characterised as conservative, tribal, quite religious, and patriarchal – although it is dramatically changing particularly in regard to the latter (Valeri 2009, 2013). In Oman, culture is rooted in the religion of Islam, which is a key part of society and has a major impact on the lives and habits of most Omanis (Abdalati 2006).

However, family, tribe and religion can also encourage entrepreneurship. First, a family member in a low individualistic society like Oman can have a significant impact on encouraging entrepreneurial activities. Therefore, if one or two family members are entrepreneurs, it is more likely that other family members would also become entrepreneurs due to high familial influence (Lee et al. 2017). Second, Islamic doctrines encourage the value of work, pushing for greater progression in life and the pursuit of education (Haq 1996), which seems to be in line with entrepreneurial values to some extent. This is particularly evident in Oman, with its more tolerant Ibadi traditions that represent a peaceful, indulgent branch of Islam. Furthermore, Oman's three centuries of mercantile rule distinguish it both culturally and socially from its fellow GCC states, where the role of the tribe is stronger than in Oman (Jones and Ridout 2015). It is, therefore, a possible factor favouring economic diversification and Omanisation, theoretically creating a supportive environment for entrepreneurship.

Moreover, Oman's status as a rentier state has societal and cultural impacts. First, as noted by Beblawi (1987), these rentier-state governments used to not be fully aware of their people's social needs due to their focus on receiving the external rents. This consequently made them "insensitive to the changing character of the domestic population [...] and to the sometimes deleterious results of policies they advocate" (Anderson 1991b, p. 102). In Oman, demonstrations in 2011 awakened the government, which had not reacted to societal changes and needs, and drew more attention to social and political reforms (Worrall 2012).

When it comes to entrepreneurship laws and regulations, Oman has ten ministries and government entities which enforce the laws related to the setting up of an SME. These regulations are well-structured and clear (see Entrepreneur Guidelines in Riyada 2015), yet the process is still bureaucratic and complex. The One-Stop Shop for entrepreneurs

created by the Ministry of Commerce and Industry in 2015 has not helped to significantly decrease the time and effort needed to complete the initial steps, such as determining the availability of commercial brand names. Access to the One-Stop shop is also limited to a few types of businesses such as coffee shops, restaurants, and gift shops. An entrepreneur still needs to seek approval from the Ministry of Environment and Climate affairs if his/her project has to do with the environment or from the Ministry of Housing if his/her business needs real estate, for instance. Finally, the law requires all local and international companies to subcontract 10% of their work to support local SMEs (Oman Ministry of Commerce and Industry 2015). The empirical part of this study examines the perceptions of stakeholders on the efficiency of these regulations and how well they are implemented.

In terms of public services, thanks to large oil and gas revenues (Rosser 2006) the government has been providing many services such as education, health, electricity, water, and gas subsidies. Such funds could also be used to encourage start-ups as they reduce costs for companies. On other hand, they could discourage people from starting a business by creating a comfort zone because the 'taken for granted' provision of the above services and good living standards is taken for granted by Omanis. In addition, government support seems limited when it comes to entrepreneurship. For example, despite the availability of generous no-interest loans to start-up businesses, the consequences of bankruptcy are discouraging. In these cases the payment of the entire loan in full is required, and an additional consequence of bankruptcy is the difficulty to subsequently secure a job in the public or private sector. There are no safety nets (e.g., no unemployment benefits) in these situations like those available in other countries (see Chapter 2).

The government started to pay the unemployed decent benefits as a result of 2011 demonstrations, but this policy lasted for only two years. The unemployed must rely on their families for social support and providing their minimum daily expenses, a situation which led to the demonstrations in 2011. It is not clear why the government did not continue offering unemployment benefits, but it seems that the government wants to push the unemployed to secure paid employment or, most importantly, to start a business⁴³. The problem in Oman is not the availability of jobs, as they are available, but they are occupied by expatriates. For instance, there are more than 40,000 engineering jobs in the private sector are filled by expatriates (Ministry of Manpower 2018). The problem with the jobs currently available in the private sector (excluding State-owned companies) is that they offer lower wages, have long hours, shorter annual

⁴³ In March 2020, the new Sultan issued directives for establishing a job security fund for laid off private sector Omani workers (Oman Observer 2020) .

leave and fewer retirement benefits than those in the public sector, where Omanis favour employment. Indeed, most Omanis work in the public sector, and less progress in recruiting Omanis observed in the private sector⁴⁴, despite huge efforts made by the Omanisation policy (Al-Lamki 2005).

The rentier-state attribute of generous education expenditures and subsidies in particular has made education completely free from the primary through to secondary levels. The HE sector is also mostly free due to generous government scholarships. The following section explores education and other skill formation systems in relation to Oman's political economy, comparing it with other skill formation models and finally discussing the implications of these systems for Oman's EE.

3.3. Education and Human Capital Development in Oman

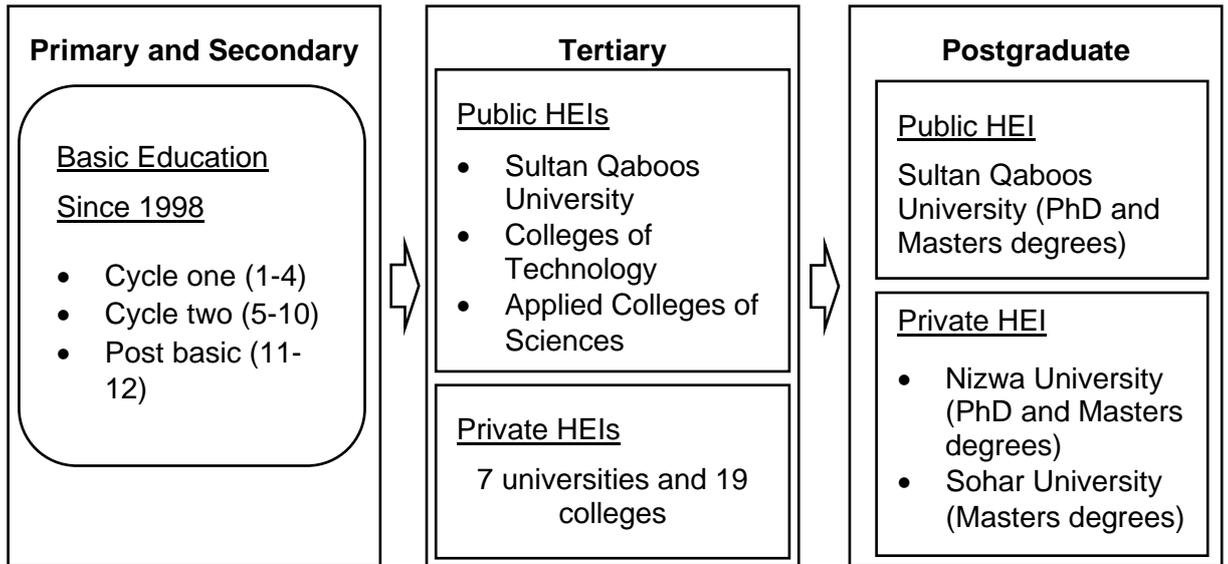
Section (3.3.1) discusses the education system, which affects human capital development (Section 3.3.2), Oman's skill formation system (Section 3.3.3) and education policy and curriculum borrowing (in Section 3.3.4).

3.3.1. Oman's Education System

Tertiary enrolment started to increase after 2011 demonstrations – from 23% in 2010 to reach 44% in 2016 and 38% in 2018 (UNESCO 2020). Most places offered tertiary education for students transitioning from basic education (see Figure 3.4 below), which is free of charge. Competition occurs when students with high marks get seats in high level institutions such as Sultan Qaboos University or external scholarships to high quality HE providers in the UK, the USA, Canada, and Australia.

⁴⁴ Expatriate employment in the private sector increased sharply from 895,556 in 2005 to 3,530,398 in 2018, whereas Omani employment increased slightly from 415,922 in 2005 to 908,090 (National Centre for Statistics and Information, 2019)

Figure 3.3 Oman’s Education System



Source: Adapted from: Ministry of Higher Education 2019

The first issue with education is that numerous entities (see below Table 3.2) are responsible for human resource development and education in Oman. These governmental entities are hierarchically structured. There is strong State control but also a large number of agencies, which can cause overlapping responsibilities. These agencies may view implementation of education policies differently, complicating their implementation at the local or regional level.

Table 3.2 National Agencies Responsible for Education Policies in Oman in 2019

National Entity	Responsible For
Ministerial Cabinet	<ul style="list-style-type: none"> • Implementing direct orders of the Sultan • Reviewing and approving policies (including manpower and education) submitted by concerned government agencies • Imposing policies to concerned government units
Oman Council	<ul style="list-style-type: none"> • Reviewing policies (including manpower and education) submitted by the ministerial cabinet • Initiating/proposing policies to the ministerial cabinet
Supreme Council for Planning	<ul style="list-style-type: none"> • Promoting national human capital development • Encouraging continual learning & development to acquire new knowledge and further develop skills
Council of the Civil Service	<ul style="list-style-type: none"> • Formulating public sector employment policies • Issuing laws, rules, and regulations regarding terms, conditions, and benefits of civil service employment
The Higher Education Council	<ul style="list-style-type: none"> • Drawing up general higher education policies for the universities and higher institutes • Linking the outcomes of the higher education institutions with the Omani market needs
Ministry of the Civil Service	<ul style="list-style-type: none"> • Supervising employment in governmental departments: recruitment training, leave, salary administration, promotion, and end-of-service benefits • Omanising public sector jobs
Ministry of Education	<ul style="list-style-type: none"> • Developing, upgrading, and advancing education, • Managing general education schools
Ministry of higher education	<ul style="list-style-type: none"> • Supervising most of the higher education institutions • Formulating higher education policies and their implementation • Administering internal and external scholarships • Supervising private colleges
Ministry of Manpower	<ul style="list-style-type: none"> • Preparing laws, guidelines and policies to regulate the manpower and vocational training sectors • Providing vocational technical training and expand training programmes to meet local manpower requirements. • Developing training curricula to meet approved vocational levels and standards, to produce certification, and to promote national employment. • Supervising seven technical colleges
Institute of Public Administration	<ul style="list-style-type: none"> • Developing capabilities and upgrading government staff skills

Sources: (Al-Hamadi et al. 2007; Omanuna 2016; Supreme Council for Planning 2016)

The government established the Supreme Council for Planning (SCP) in 2012 to resolve the issue of weak planning and coordination between various entities and ministries (see Chapter 3), including those concerned with the education sector (Supreme Council for Planning 2016).

A second issue is that Omani education in general and the HE sector in particular is low-quality. Despite generous spending on education, Oman is 103rd in the world and last among the six GCC countries in quality of education (The United Nations Development Programme 2018). With the exception of SQU, which was recently ranked 450th in the World University rankings (2019), all other governmental and private HEIs are of low quality, particularly the private ones. The Omani government's realisation that most HEIs are low quality led to the implementation of reforms in 2010, when the Oman Accreditation Council was replaced by the Oman Academic Accreditation Authority (OAAA) according to Royal Decree No. 54/2010. Its goal is to regulate, supervise and evaluate the quality of higher education in Oman⁴⁵.

There are certain reasons for HE's low quality. The low quality of general education does not prepare students well for HE, let alone for the labour market⁴⁶. Therefore, students who enrol in HE need to go through a foundation year, proving that the education system is weak (Islam 2014). Teachers' lack of qualifications and competency (particularly in private HEIs) is also a major reason for poor academic performance in Omani colleges, as Alami (2016) found. A study by Narayanan et al. (2012, p. 23) attributed the lack of competency of the faculty at private HEIs to the lower level of "supervisory support, job security and skills discretion" due to these private HEIs' limited financial resources compared to their public sector counterparts which are generously funded by the government.

When it comes to EE, there is a lack of qualified teachers. One of the few initiatives in this regard is a programme for newly recruited teachers and lecturers focusing on EE, amongst other areas. After recruitment, these teachers are sent abroad for a master's degree. They spend a few months working in industry to gain industrial experience and to acquire entrepreneurship skills, followed by a few months of training within the college to learn modern teaching techniques and methods of transferring knowledge and skills to students (UNESCO-UNEVOC International Centre 2016). Nonetheless, this well-structured training covers only a small number of lecturers.

⁴⁵ OAAA aims to ensure that international standards are applied and maintained by motivating HEIs to improve their internal quality (Oman Academic Accreditation Authority 2014).

⁴⁶ This is the case despite the fact that a major review of the education system in Oman was undertaken between 2003 and 2006, particularly of the secondary level (post-basic education) (Issan and Gomaa 2010).

3.3.2. Oman's Human Capital Development

This section discusses human capital development in Oman and its weaknesses and relates these to the country's political and economic skill formation context (see also Chapter 2) and the education system (Section 3.3.1). As discussed in Chapter 2, there is a global tendency towards investment in human capital development for economic growth. Oman realised that developing human capital will be more likely to sustain the economy than relying on inherently unstable oil revenues. Hence, Oman invested heavily in human capital through an HE expansion, evident in all of its five-year plans and Vision 2020. This investment has become more pressing since the start of this century due to the urgent need for economic diversification. The policy of expanding higher education, such as by offering many internal and external scholarships, is an attempt to push the crumbling Omanisation process by raising the numbers of high-skilled workers. Nevertheless, it has had limited success, as discussed in Section 3.2.1.

This HE expansion policy has created problems such as skills mismatch and shortages, which have subsequently increased the unemployment rate in the private sector (Belwal et al. 2017). The high unemployment rate is mainly due to Omani workers' reluctance to work in the private sector. In addition to expatriate domination in this sector, there is a vast difference between the public and private sector in terms of wages, working hours, annual leave, professional development, career advancement, and retirement benefits, making the public sector more attractive than the private sector (Ansari and McGlade 2018). The EEP has aimed to develop entrepreneurial skills and shift more workers to the private sector through SME start-ups (see Section 3.5.2) in an attempt to reduce labour market pressures caused by increasing numbers of HE graduates. This is not unique to Oman as there is evidence to suggest high levels of over-qualification and skills mismatch in most major economies (Siddiqui 2016; Lloyd and Payne 2003).

Furthermore, policies such as the expansion of formal higher education have social implications. Expansion is not necessarily driven by economic needs or manpower requirements, but by citizens who wish to gain higher social prestige as known as "diploma Disease" (Beblawi 1990, p. 135). Although Oman has an economic purpose for investment in education (creating jobs for Omanis), the large HE expansion was a result of pressure from the 2011 demonstrations and reached 40% of post-basic education graduates in 2018, as discussed in Section 3.3.1.

Moreover, in Oman as elsewhere, the importance of human capital development continues to rise given that the global economy is argued to be increasingly knowledge-based and information is seen as the major source of growth (see Warhurst et al 2008 for a critical perspective). Human capital is also linked to entrepreneurship through start-

ups that are created through R&D, and the transfer of patents or research results into products and services (Martin et al. 2013). This has opened another field for entrepreneurs to create SMEs specialising in products and services that are based on knowledge. The recent establishment of the Oman Innovation Park in 2018, which specialises in promoting this type of SME, is evidence of this development.

As discussed in Chapter 2, Oman lacks market characteristics such as a competitive labour market, deregulation, a large consumption market, and the strong private sector commonly seen in LMEs (Busemeyer and Trampusch 2012). Lacking these⁴⁷ may affect Oman's efforts to implement entrepreneurship and EE policies. Yang (2016), on the other hand, argues that investment in education is more significant for entrepreneurship than these market features. EE can be introduced when the education sector is active and heavily invested in regardless of the political economy context. For example, this is evident in China's planned economy, which has high levels of entrepreneurship (Yang 2016). Therefore, entrepreneurship can be seen in countries with different political economies (Sanyang and Huang 2010) and in non-democratic countries. Successful entrepreneurship models can be seen in the UAE, also a rentier state, particularly the city of Dubai (Kaya et al. 2019). Oman has more democratic practices than the UAE. For example, while Oman has a popularly-elected Shura Council, no elected council exists in the UAE. The following section explores the impact of Oman's particular context on entrepreneurship and EE starting with skill formation.

3.3.3. Overview of Oman's Skill Formation Strategies

The purpose of this section is to describe Oman's skill formation strategies. As discussed in Section 2.4, there is a vast comparative capitalism literature that explains various approaches to education and skills related investment. Evidence of the power of persuasion of the rhetoric of HCT can be found in the education and skills formation systems of many nations. However, it is clear that these nations differ in the ways they use their education and human capital systems/strategies to achieve their planned results. Although, like other countries, Oman relies on the rhetoric of human capital investment, it is trying to reach its preferred outcomes in its own way, and strategize on skill formation to diversify its economy. However, a wider understanding of the literature on skill formation systems allows us to draw parallels with other political and economic contexts. There are then some lessons to be learnt from other systems and how their skill formation systems approach entrepreneurial skills development.

⁴⁷ For example the average private consumption expenditure is 7.225 USD billion from 1980 to 2018 (CEIC 2018) for a small population of 4,700,000 (Oman National Centre for Statistics and Information 2020).

Oman's status as a rentier state has a major impact on its skill formation strategies⁴⁸. First, in Oman, the State has a high level of intervention in the economy. It owns most of the domestic banks (La Porta et al. 2002), assets, investments, and all State-Owned Enterprises. It also sets regulations, policies, and legislation, and the public sector is the main employer in the country (Mashood et al. 2009). This extensive state intervention is a common feature in rentier states, (Beblawi and Luciani 2015). This level of intervention appears positive when countries need to direct their skill formation strategies to develop particular skills, such as adding technical specialties to vocational training to enhance industrialisation and strengthen the private sector (see Chapter 3). The powerful State in Singapore, for instance, intervened through directing its education system to serve the State's trajectory to create knowledge economy skills, and the State in South Korea reformed its education system to meet its needs to create technological industries (Sung 2006). State intervention in Oman is similar to that in the developmental state, yet the latter is based on attracting private enterprises rather than state ownership (Siddiqui 2016). Most of the large companies creating the majority of Oman private sector are in fact, state-owned, which means there is no real private sector of any real significance.

Second, Oman's major skills policy has typically been non-industrial, and the skills being developed are mostly logistics and services-oriented due to Oman's small and weak private sector (Al-Lamki 2005). Hence, the government is looking to develop the skills necessary to expand the supply of industrial skills and diversify the economy. For example, technological education programmes, meant to equip graduates with intermediate and high level skills and experience to meet anticipated labour market requirements, have been increased. Five colleges of education under the supervision of MOHE (which used to graduate schoolteachers) were transformed into colleges of applied sciences offering engineering, information technology, business, applied sciences, pharmacy, and fashion design. Another seven colleges of technology, under the supervision of Ministry of Manpower, offer three basic majors: Engineering, business, and ICT. In addition, all new private HEIs have been mandated by the MOHE to offer similar majors and have also been permitted to include majors not offered by public colleges, such as logistics, and tourism. The qualifications obtained from these programmes are a Diploma (two years), Advanced Diploma (three years), and Technological Bachelor (four years) after the foundation year. Most graduates are diploma holders who are expected to work as technicians in factories or companies (Oman Ministry of Manpower 2016).

⁴⁸ Skill formation literature is mostly associated with political economic specificities, see, for example (Busemeyer and Trampusch 2012).

The current non-industrial sector composition can be a hurdle for entrepreneurship because it leads to fewer types of businesses, small consumption levels, competitive markets, limited local and international networking, and less tech transfer (Thurbon and Weiss 2016). Large consumption, highly competitive markets, and high-tech transfer can, however, be seen in successful LMEs, CMEs (Bockman 2011), and developmental states (Kwon 2005). Furthermore, the private sector in these advanced models is in a position of strength to influence the stock of skills and powerful enough to largely absorb these skills in the marketplace. For example, in Singapore, the government has been promoting high skills since the 1990s but has also been creating an innovative competitive market with industrial policies that aim for a knowledge-based economy (Leggett 2007). Several studies argue that entrepreneurship flourishes in a competitive, large, stable private sector (Ebner 2010; Decker et al. 2014).

Third, Oman's government has the power of finance (i.e., large energy revenues) and authority (e.g., enforcing policies), yet its goals to diversify the economy and nationalise labour (i.e. Omanisation), outlined in previous Five-Year Plans (see Section 3.2.2) have not progressed as planned (Al-Lamki 2005). This is a reflection of insufficient planning (Al-Kindy 2007), which could be problematic for skill formation and entrepreneurship policies. For example, poor planning can be seen in the rushed implementation of the HE expansion policy. Because this policy was put in place without carefully considering the need for a strong private sector that could provide work for graduates for the policy to be successful, it increased frustration among young people. The entrepreneurship policy has been developed and could open up another career pathway through SME start-ups for the large number of graduates that cannot be absorbed by Oman's public and private sector. However, strengthening the private sector and relaxing state control (Ennis 2015), would imply sharing power with the private sector and opening up the market to more competition. The reluctance to power share is another rentier state feature (Beblawi and Luciani 2015).

Furthermore, promoting more entrepreneurial activities and entrepreneurship education could be a significant commonality with more liberal economies. That is because countries such as the USA and the UK have historically set the precedent for deploying entrepreneurship and EE more than any other countries in the world. The political influence of these countries on Oman and other GCCs, through the development of US power in the Gulf with the "the linkages between Gulf petrodollar flows, US dollar hegemony, and the emergence of neoliberalism" (Hanieh 2015, p. 53) has consequently led to integration, particularly with the US and the UK⁴⁹. Oman has had a tendency to

⁴⁹ In Oman, this can be seen in the banking sector, the stock markets, and the economy's openness to the neoliberal markets. The US and the UK were among Oman's top five import and

integrate with these neoliberal countries through liberating its economy. For example, Oman joined the World Trade Organization in November 2000 (World Trade Organization 2016) and signed a free trade agreement with the US in January 2009 (Office of the US Trade Representative 2016). Given that these countries have a long experience with entrepreneurship and top entrepreneurship indexes (The Global Entrepreneurship and Development Institute 2018) and that the USA has one of the world's strongest private sectors (Mazzucato 2015), this integration could be seen to be advantageous for entrepreneurship growth in GCCs, for example, it could lead to exchanging entrepreneurs' experiences, recruiting teaching staff, and policy and curriculum borrowing. I focus on the latter in the following section, as this thesis's main enquiry is examining the EEP educational policy (see Chapter 1).

3.3.4. Education Policy and Curriculum Borrowing⁵⁰

It seems reasonable for Oman to borrow educational policies and curricula from countries more advanced in the field of entrepreneurship, as many countries have previously attempted in the area of education. For example, China borrowed its education reform policy from the West (see Section 7.3.6). It is clear from the MOHE Guidebook that despite EEP having been designed specifically for Oman, policy and curriculum borrowing occurred, as indicated by the long list of foreign institutions consulted during the EEP design phase (see Appendix 3). Chapter 7 discusses the implications of this approach. In this section, I, very briefly, explore the literature regarding other countries' experiences.

A study by Phillips and Ochs (2003, p.460) affirmed the complexity and difficulty of adopting 'alien' policies, highlighting the risk of adopting an "educational idea born and nurtured and brought to maturity in a foreign context". Steiner-Khamsi (2014, p. 153) linked that to political economic and cultural reasons. Another study by Steiner-Khamsi (2006) emphasised the significance of the timing of policy borrowing. The study discussed the case of Mongolia and the Kyrgyz Republic which borrowed old educational reforms from New Zealand, South Africa and Australia despite the problems with these reforms in those countries. In Vietnam, a transitioning economy similar to Oman's, Mori and Stroud (Forthcoming, p. 26) found that importing unaltered skills policies based "on the myth of the superiority of developed countries' skills policies" resulted in a fragmented skill formation system. These borrowed skills policies brought some of the same problems from their countries of origin to Vietnam, such as over-supply with low demand

export partners until the year 2000. In the last 15 years, the UK is no longer in the top five, having been replaced by the developmental state countries Korea, Japan, China, and India (World Bank 2016).

⁵⁰ See the difference between policy and curriculum borrowing in Chapter 2.

– see also Revina and Leung 2018 (2018, p.49) on the case of curriculum borrowing in Indonesia.

3.4. Entrepreneurship in Oman

Recent studies have highlighted Oman’s increased need for entrepreneurship and SMEs in an effort to spur Omanisation and diversify the economy (Keat et al. 2011). For instance, a study by Varghese and George (2015) using data from 250 respondents who started their SMEs during the period 2000-2015 in Oman reveals that recent entrepreneurship promotion initiatives on the part of Oman’s government led to a reasonable increase in the number of SMEs compared to previous decades⁵¹. However, this increase is not sufficient to meet the government’s policy ambitions or offset the cost of EE. This section presents examples of key entrepreneurial initiatives.

3.4.1. Entrepreneurship Policies, Initiatives, and Impact on Economic Diversification

This section reviews the impact of introducing entrepreneurship as a potential method of diversifying the economy and Oman’s efforts and policies for increasing future entrepreneurship levels. There are crucial factors which have encouraged Oman to consider entrepreneurship as an economic contribution. First, as discussed in Section (3.2.1), Oman’s population is young - in 2014, around 30% of Omanis were under the age of 18 (Oman National Centre for Statistics and Information 2015a, p. 3) and there was an increasing rate of enrolment in tertiary education. Second, Oman has some characteristics that are conducive to entrepreneurship. Oman is “a tax haven, with no levies on personal income, capital gains or housing” (Shachmurove 2009, p. 6). In addition, Oman’s economic freedom was evaluated at number 56 on the world Index of Economic Freedom for 2015⁵², with scores of 61 for business freedom, 76 for labour freedom, 76 for trade, and 65 for stabilised investment freedom (The Heritage Foundation 2019). However, these scores are low compared to top countries in the entrepreneurship index such as the USA, the UK and Singapore⁵³. Third, in terms of becoming an innovation-driven country (a key pillar for entrepreneurship growth, as discussed in the previous chapter), the Research Council (founded in 2010) and Muscat Science Park (founded in 2018) promote R&D and innovation in the country. The

⁵¹ 5,400 SMEs were registered in 2018 compared to only 2000 in 2000 (Oman National Centre for Statistics and Information 2019).

⁵² This places Oman among the top 5 Arab countries, and at position 88 out of 180 world countries.

⁵³ In economic freedom, the USA scored 76.8 (ranked 12), the UK scored 79.8 (ranked 7) and Singapore 89.4 (ranked 2) in the world (The Heritage Foundation 2019).

establishment of the Public Authority of SMEs (Riyadah) in 2014 aims to promote competitiveness and motivation in society.

Oman has indeed been working to enhance the entrepreneurial environment through establishing a number of initiatives and programmes. Table 3.3 below shows key initiatives selected to include both government and private programmes. Also, these initiatives were selected to include a variety of support: funds, education, training, and other benefits such as allocating land and tenders.

Table 3.3 Examples of Key Government and Private Initiatives for Supporting SMEs

Programme	Year	Entity	Aim
Intilaaqah	1995	Shell Oil Company	To develop the entrepreneur trainee's ability to conceptualise the business environment by enabling him/her to acquire necessary skills for running small businesses professionally
Fund for the Development of Youth	1999	Ministry of Manpower	To promote entrepreneurship among Omani youth, offering equity financing, starting at OMR 20,000
SANAD	2001		To fund the establishment of small-scale enterprises for the public with maximum of OMR 20,000
INJAZ	2005	NGO	To bring the business and education sectors together to educate future entrepreneurs
Commercial loans	2013	The Central Bank of Oman	To allocate 5% of its commercial loans to SMEs
Land allocation	2013	Ministry of Housing	To allocate commercial and residential lands in different governorates to build business centres dedicated to entrepreneurship and offer them for use by SMEs.
Payment expedition	2013	Ministry of Commerce	To expedite payments for SMEs who have government contracts .
SME support	2013	The Tender Board	For no less than 10% of the value of purchases and government tenders to be provided to SMEs
SME support	2014	All government entities	For employees desiring to dedicate themselves to their own businesses full-time and receive salaries from the government for one year.
SME loans	2014	All Omani banks	To offer a low-rate of interest to SMEs and start-ups run by Omani citizens
Riyada and Al-Raffd Fund	2014	The Public Authority of SMEs	1) To develop and accelerate the establishment of SMEs through collaboration with public and private authorities ; (2) to instil the culture of entrepreneurship in Omani youth; (3) to create more renewable job opportunities for Omani youth through SMEs, and (4) to play a key role in diversifying the economy through SMEs which add value to the national economy by supporting innovation, and through use of modern technologies
Entrepreneurs Award for SMEs			To recognise the Best Male Entrepreneur and Best Female Entrepreneur; Best Project/Idea/Concept; Best Home Business, and Best Media

Sources: (Riyada 2013; The Times of Oman 2014; Nakhweh 2014; Yousuf 2014; Intilaaqah 2015)

Although these initiatives and policies help promote entrepreneurship, national statistics show that they have not succeeded in making entrepreneurship one of the prime

contributors to national income and private sector job creation⁵⁴. Ennis (2015) asserted that there is not a major issue with financing of entrepreneurship related activities in GCC states, but there is a need to develop a framework of entrepreneurial skills and conditions for promoting entrepreneurship and SMEs nationwide. Al-Shabibi (2017)⁵⁵ indicated that the culture of entrepreneurship has not yet permeated Omani society. Therefore, Oman seems to lag behind some of its neighbouring GCC states in terms of providing more support for implementing entrepreneurship policies, especially considering that the autocratic nature of its government could facilitate this (Ennis 2018). Other studies, e.g., Wennekens et al. (2010) have argued that more industrial strategies, deregulation, and a liberal labour market would provide the flexibility needed to spur more entrepreneurship growth (see also Chapter 2).

Table 3.3 shows that the first initiatives for supporting SMEs started long before the EEP initiative was introduced. These early initiatives, such as SANAD funds, stopped in 2011 after having failed to achieve their policy goals. Statistics show that current SMEs are not particularly dynamic in Oman⁵⁶. Policymakers have adopted the view that developing entrepreneurial skills and changing mind-sets through investing in educational programmes is a necessary initial step and could be as or more impactful than entrepreneurship funding programmes (see more discussion of this in Chapter 7). A major national HE graduate survey conducted by the MOHE in 2015, before the EEP's implementation, revealed that only 0.6 % of new HEI graduates chose SMEs as a career pathway, while 68.6% went for government jobs, and 30.8% sought private sector employment (Oman Ministry of Higher Education 2015b).

It is too early to evaluate whether the EEP is meeting the ambitious goal of entrepreneurship contributing to economic diversification – there is a lack of data to measure the extent of entrepreneurship in Oman (Riyada 2018) – but as will be argued this thesis suggests it is unlikely to do so. The previous section argues that entrepreneurship education has complemented Oman's HE expansion policy, but it also supplements previous entrepreneurship initiatives on skill development, as the following sections discuss.

⁵⁴ In 2014, the number of Omanis working in the private sector was 207,070, representing 5% of the total population of Oman, whereas the number of expatriates reached 1,510,393 (Oman National Centre for Statistics and Information 2015, p. 17).

⁵⁵ These survey results were published as part of this thesis (see Appendix 8).

⁵⁶ Although 90% of Omani companies are SMEs, they only contributed 15% to the GDP in 2017 (Riyada 2017) and employed less than 15% of workforce in 2013 (Muscat Daily 2013).

3.5. The EEP in Oman

The EEP in Oman is a recent initiative which is part of a set of broader national efforts to create an entrepreneurial ecosystem and contribute to diversify the economy. Al-Abri et al. (2018), found that a lack of human capital (basic knowledge and entrepreneurial skills for starting a business) has been the first and main challenge in creating an effective entrepreneurial ecosystem in Oman. The EEP was announced in 2014 at Sayh AlShammikhat National Symposium. It was to be offered by all Omani HEIs as a mandatory course. This section explores the EEP as part of Oman's economic diversification and job creation strategies.

3.5.1. The EEP as Part of Oman's Skill Formation Strategies

At the tertiary level, there is a tendency to transform education towards the development of more technical skills⁵⁷ and STEM subjects because these skills are assumed to be needed by the private sector and industry. Entrepreneurial skills are seen as part of this transformation because graduates of the EEP can also help strengthen the private sector by starting SMEs. Technical majors (e.g. information and Communication Technology (ICT) are often considered to be more closely related to entrepreneurship, and most studies, e.g., Matlay (2005) argue that entrepreneurship subjects relate to business schools/departments⁵⁸. Other studies consider the relation between ICT, business and entrepreneurship (Swaramarinda 2018). Therefore, entrepreneurship as a subject is seen as easier to integrate into these subjects than into humanities and social science subjects (e.g., education, arts, social work etc.), the number of which have been fundamentally reduced in HEIs in Oman since the beginning 2000s. Oman's interest in entrepreneurship has been increasing since then, and in 2021 the second government-operated university, Oman University, will be entrepreneurship-oriented. Oman University is intended to be a centre of scientific discovery, innovation, and entrepreneurship⁵⁹.

Similar to entrepreneurship, logistics and tourism are gaining a huge amount of interest because they are considered key contributors to the economy (Tanfeeth 2017). Therefore, all recently established HEIs include logistics as a major. Furthermore,

⁵⁷ As mentioned in Chapter 1, in 2005/6, the MOHE transformed five out of six colleges into applied science institutions.

⁵⁸ Business is part of the humanities or social sciences in some contexts, but in Oman it is a key major in technical colleges.

⁵⁹ The Minister of Higher Education explained in a seminar entitled 'Designing a Stimulating Environment for Entrepreneurship in Oman University' that this university will teach academic disciplines in various branches of the modern sciences, such as engineering, math, technology, and entrepreneurship (Oman Observer 2015).

tourism, another field that can aid Oman’s economic diversification, has been included in the skill formation strategies through the new Oman Tourism College.

At the primary, middle and secondary education levels, there is also a tendency towards EE, but less so than in the HE sector. Unlike the MOHE, the Ministry of Education will not formulate a specific entrepreneurship curriculum, but it will rather integrate entrepreneurship into various curricula (Yousuf 2015). The following section explores the EEP, which is this study’s focus.

3.5.2. EEP Overview: Structure and Goals

This section presents the aim and structure of the EEP, which is this study’s main focus. This study follows Oman’s EEP from its inception to its first two years of delivery (from 2014 to 2016) and comments on the process of skill development. Using this programme as a lens enables us to provide a critical account of the implementation of an EE policy, which is part of Oman’s wider skill formation strategy in a rentier state context.

A review of policy and institutional documents provided insights into the EEP’s implementation across the three higher education institutions featured in this study (see Chapter 4). The MOHE EEP guidebook⁶⁰, the mandatory roadmap all HEIs must follow, has a broad scope, including many topics that entrepreneurship courses can list (see Table 3.4 below). This gives each HEI flexibility to focus on certain content and tailor the course based on its needs. For example, SQU has an entrepreneurship course at the college of engineering which is different from the course at the college of economics (see Chapter 7).

Table 3.4 MOHE EEP Guidebook Content for HEIs

First: Content related to Theoretical Aspects	
Course Title	Course Description
Learning Objectives	Learning Outcomes
Learning Strategies	Business Plan
Second: Content related to Practical Aspects	
General Objectives	In-Class Activities
Practical Start-up	Extracurricular Activities
Third: Content related to Evaluation	
Theory and Practice Assessment	Evaluation Criteria
Course Impact Evaluation Criteria	Course Quality Evaluation

⁶⁰ MOHE formed a committee of seven members from the MOHE, governmental institutions and the private sector to draft this guidebook and then it was distributed to all HEIs.

Source: Adapted from Entrepreneurship and Innovation Guidebook in (Oman Ministry of Higher Education 2015, p.2)

Table 3.4 above shows that each HEI must include three parts in their entrepreneurship course: theory, practice and evaluation. However, it is up to each HEI to choose the material to include under each these parts. One HEI with engineering programmes might include how entrepreneurship can be pursued in engineering science in its theory part, for instance. Another HEI might have activities about starting up a business in agriculture if that institute has an agriculture department or college.

The EEP's learning objectives and outcomes (see Appendix 3) can be summarised in three main points. These are (1) developing entrepreneurial knowledge and skills (with an emphasis on innovation, business plans and risk-taking), (2) linking entrepreneurship with economic benefits, and (3) promoting awareness of Oman's entrepreneurial system. At the first sight, these objectives may seem quite ambitious for an academic course. However, the empirical part of this thesis will reveal if this is the case. For example, this study's participants reflected on the EEP's ability to promote knowledge of Oman's entrepreneurial system, considering that some curriculum content has been borrowed from other countries (see Chapter 7).

Introducing the EEP in the HE sector seems to be in line with Oman's transition into intermediate and high-skill equilibrium through an HE expansion policy. Participants will hold undergraduate degrees in fields such as engineering, business, medicine, education, and sciences, and it is expected that with the introduction of the EEP more of them will become entrepreneurs with intermediate and high-level skills. These skills are expected to give them the opportunity to create SMEs related to their disciplines of study (e.g., engineering, finance, medicine etc.) rather than micro businesses (Criscuolo 2017), which are not mentioned in the policy. These businesses are expected to make a significant economic impact and employ as many Omanis as possible – see Table 4.4. These high-impact SMEs should contribute to economic diversification.

3.6. Conclusion

Given that this study focuses on Oman's EEP in order to examine its potential to diversify the country's rentier state economy, it is essential to understand the wider context of political, economic, cultural, and skill formation where this specific educational programme exists. This chapter, therefore, has outlined the current context of Oman as a rentier state, its future intentions, and the logic of introducing EE in the HE sector. Oman's current contextual specificities could be expected to contribute to economic diversification, Omanisation of the labour market and entrepreneurship growth. The

young population, the strategic location (able to attract foreign investment), and large oil revenues can be potentially exploited to create human capital and reduce dependency on energy for the national income. As a result, Oman's budget has been channelled to a number of government programmes to stimulate more SME start-ups.

However, the top-down political structure, bureaucracy, conservative society, and rentier culture can be obstacles for entrepreneurship in Oman. Oman's rentier-state status may slow progress toward economic diversification and Omanisation. Most importantly, efforts of the recent HE expansion policy to create human capital were flawed due to a small private sector, skill mismatch, and foreign labour dominance. This led to the creation of the EEP with the goal of graduating Omani entrepreneurs who are able to strengthen the private sector and reduce expatriate control through the establishment of SMEs.

Finally, this chapter has highlighted some challenges related to context and the skill formation system and strategies which may challenge the successful implementation of the EEP. The low quality of HE education and skill formation factors in general and with regards to entrepreneurial activities in particular are examples of these potential obstacles. The empirical part of this study examines these challenges and their implications for the EEP's potential to diversify the economy.

4. Chapter Four: Methodology

4.1. Introduction

This chapter outlines the methodology for the study, justifying the rationale for using a mixed-method approach which primarily consists of the elicitation of qualitative data together with the collection of quantitative data as a secondary method. The chapter considers research objectives (Section 4.2), ontology, epistemology, design and strategies (Section 4.3), mixed method validity and reliability (Section 4.4), methods and data collection (Section 4.5), sampling and access (Section 4.6), ethics (Section 4.7), piloting (Section 4.8) and data analysis (Section 4.9). The final Section (4.10) gives a critical account of the fieldwork and data collection.

4.2. Research objectives and overview

The study focuses on one higher education initiative, a recently introduced EEP which is part of broader skill formation strategies supporting economic diversification in Oman. It explores stakeholder perceptions in order to address research objectives and questions (see Chapter 1). Those involved with the development, implementation, and use of this programme – policy makers, HE managers, lecturers, and students – were involved in the study. In addition, views were also sought from a range of entrepreneurs in order to represent those with first-hand experience developing and operating small and medium-sized businesses (SMEs) in Oman.

4.3. Ontology, Epistemology, Research Strategy and Design

The constructivist position, which holds that ‘the social actors construct their social world’ (Blaikie 2009, p. 170), was employed to collect knowledge and experience which stakeholders spontaneously construct, and which reveals their understandings and attitudes. This “knowledge is a compilation of human-made constructions” (Raskin 2002, p. 4) and hence it is not the unbiased finding of one “objective truth” (Castelló and Botella 2007, p. 263) on entrepreneurialism. Rather, multiple truths could have constructed this understanding. The “truths” in this study are in fact the “perspectives” that various stakeholders have regarding entrepreneurialism and the potential of initiating EE as part of a skill formation strategies to contribute to economic diversification. These truths might be different from each other.

Taking the stance of an interpretivist suited this study as the main method was qualitative. This thesis used a cross-sectional approach, collecting data through interviews and a survey. The main method was qualitative as it is best for investigating the knowledge and experience by which stakeholders construct ‘reality’ or ‘truth’ (Blaikie

2009). The qualitative approach entailed interviewing stakeholders and listening to their “voices and experiences”, ‘privileging a first person perspective’ (Brinkmann 2014, p. 1009) .

This stance allowed me as a researcher to ‘capture the actual meanings and interpretations that actors subjectively ascribe to phenomena in order to describe and explain their behaviour (Johnson et al. 2006, p. 132). I needed to enter their realities not only by interacting with and speaking to the study participants, but also most importantly by listening to their “stories” and realities with circumspection. I then needed to interpret these in-depth data (descriptions of their real experiences and actual events that construct their perspectives) to better understand their understandings of entrepreneurialism. In this social inquiry, the researcher cannot simply observe facts or objective truths (i.e., the empiricist or positivist stance) (Creswell 2013). Rather, these facts and truths are grounded on stakeholder understandings of entrepreneurialism and their perceptions of the potential of the EEP to develop skills, which requires an interpretivist epistemological positioning to embrace the complexity of these social perspectives.

One dilemma for this position is the probable risk of yielding inter-subjective data based on “viability” (Ritchie et al. 2013). This subjectivity, created by multiple realities and truths, is common in sociological qualitative (Marshall and Rossman 2011; Ritchie et al. 2013) as well as quantitative sociological studies, particularly those examining meanings (e.g., Creswell 2013; Hussein 2015). Another dilemma is that the researcher may not see the same world as constructed by the actors. Therefore, the researcher, whether an insider or outsider, needs to bear in mind that the actors/participants’ constructions of reality or “multiple truths” is what provides understanding. I needed to keep in mind that this is a sociological study where there are no ‘regularities that hold law-like properties’ (Ritchie et al. 2013, p. 24) as found in the natural sciences. This stance helped me to seek meaning not through my lens but by interpreting participant perspectives. This was accomplished by constant reading, rereading, and analysis of interview extracts exemplifying those perceptions, keeping in mind the considerations mentioned above while doing so.

This stance had some implications. First, the fact that, I (the researcher) shared commonalities such as nationality, culture, religion, ethnicity, and a similar educational background with the participants was likely to have implications for my interpretations of the findings. To reduce the influence of these factors, I made sure not to interview people whom I know well in order to reduce the likelihood of participants being “concerned about being judged by a peer,” which may have made them “worry about breaches of privacy

and local gossip” (Ryan et al. 2011, p.51). I also made sure while interviewing participants that I did not let the cultural and social characteristics, we may have had in common influence me while interpreting their responses (Brownlie 2009). In fact, being an insider helped me avoid misunderstandings which may occur in cross-cultural and cross-language interviews (Rubin and Rubin 2012).

Second, the fact that I gained my first degree from Oman HE system and dealt with HEIs during my employment in the same country might have given me some experience of how this higher education system works. This experience helped me select the study sites, easily creating channels of communication for the field work and locating relevant documents. Given that I completed my first degree from Sultan Qaboos University in 2001, earned my master’s degree in the USA (2006-2008), and completed my PhD in the UK caused me to experience different systems and created critical distance⁶¹. This distance helped me to step back, assess Oman’s HE system, and avoid bias for or against this system. Fighting familiarity is another challenge that the researcher, particularly an insider like myself⁶², needs to pay attention to (Delamont et al. 2010).

Furthermore, the study involved equal gender participation, which in the case of Oman meant interviewing Muslim women. Some studies, e.g., Azim (1997); Dwyer (2000); Walseth (2015) highlighted some challenges in researching Muslim females in the education sector. One example of these challenges is that if a woman is religious, she may refuse to be alone with an unfamiliar male. She will usually request the presence of a close relative such as a brother, father, or son during the interview (Hossain and Moinuddin 2013). This empirical study included one incident of a female’s interview being cancelled at the last moment upon a call to her husband (see Section 4.9). However, this is not common in Oman and I did not experience such incidents with the other female participants, whose number was larger than that of the male participants. As for the researcher being male, speaking with women was not an issue while conducting the interviews. Despite Oman being a conservative society, all HEIs, workplaces, and public places are mixed. Generally, men can sit, speak and communicate with women without any issues like cultural stigma. However, this varies from one country to another in the Muslim world. For instance, while Lebanon is an open society, Saudi Arabia has rigid gender roles (Feghali 1997). Oman’s culture is roughly between Lebanon and Saudi Arabia in this regard.

⁶¹ I also was well-informed of other HE contexts such as GCC states, Singapore, and Malaysia as part of my previous job in the International Relations office of the Ministry of Education.

⁶² This is also called reflexivity, which means that the researcher should locate his/her position, whether insider or outsider, in qualitative social science research (Finefter-Rosenbluh 2017).

This was an exploratory study which sought to examine the ‘value-laden’ process (Denzin and Lincoln 1998, p. 8) by which Omani HE stakeholders have constructed perceptions of the EEP at three study sites (HEIs in Oman). An inductive strategy was most suitable in order to put social actors’ points of view at the centre of understanding and interpreting actions and phenomena (Blaikie 2009, p. 90). The survey’s secondary role in the thesis did not require adopting a deductive approach, as this study did not test theories (Creswell 2013).

Although this study specified certain places, such as HEIs, as locations for collecting HE student and faculty/staff perceptions, the thesis did not consider either these sites (see Section 4.6) or participants as case studies for three reasons. First, the case study approach involves conducting continuous observations and series of interviews in a “systematic manner” over a specific period in order to establish causal relationships (Yin 2013). Second, this study did not examine participants’ behaviours in their “social settings” as usually done in the case study approach (Yin 2009, p. 9). Third, despite this study’s accumulation of in-depth data and intensive analysis, it will not do so within a ‘specific complex and situational context’, as done in case study research, (Yin 2013), i.e., these three HEIs are study sites and not necessarily ‘complex’ multiple case studies⁶³. Not using case studies gave me more flexibility to collect data from a wider range of study sites (31) during survey distribution and additional data from other study sites (outside the three study sites) in the interview (see Section 4.6).

4.4. Mixed Method Approach: Validity and Reliability

A mixed method approach was used for the thesis, and attention was given to the triangulation ⁶⁴of perspectives. Given that this thesis worked to achieve a contextual understanding of experiences, there was a need for an open-ended type of research (Lewis 2015) because this type could identify themes and concepts for analysis (Creswell 2013). While interviews, the main method for data generation, generated rich, authentic, and deep data (Hussein 2015), the survey data gave ‘a snapshot of respondents’ attitudinal information’ (O’Leary 2013, p. 203) and set the parameters of the research. At the initial research design stage, the survey was intended to provide background information, inform the interview schedule, and scope and profile stakeholders’ attitudes in order to inform the qualitative part of the thesis. However, during the analysis stage

⁶³ In other words, these sites were not social entities or what are called ‘sociological constructions’ (Blaikie 2009, p. 170) of my sample which encompassed not only students and lecturers within the three HEIs but also policymakers and entrepreneurs from outside these ‘constructions’

⁶⁴ Or it is called auditing (Lincoln and Guba 1985) which means using multiple methods in examining similar phenomena, which leads to more “credible” finds (Yeasmin and Rahman 2012; Hussein 2015), and checks the validity of the qualitative (Guion 2002) and quantitative methods (Creswell 2013)

the survey results were also useful in providing another level of robustness of the thesis findings by comparing these results with the interview findings. Survey results were thus used to triangulate with the qualitative findings.

Therefore, the validity and reliability⁶⁵ of both the qualitative and quantitative aspects of this thesis's mixed method data collection and data analysis were taken into consideration from the start of the design in order to create trust in its findings (Golafshani 2003; Hammersley 2007). The robust survey and interview results enabled triangulation and increased the trustworthiness of the research (Lune and Berg 2016). The triangulation process made use of various sources: a pilot survey and pilot interview, an official documents review, and the final survey and interview results. The following sections explain each method and why triangulation was employed to increase validity and reliability (Yeasmin and Rahman 2012).

4.4.1. Interviews

Qualitative research approaches have been subject to criticism around their subjectivity, lack of transparency, and generalisability (Silverman 2016). I took steps to avoid or limit these problems in order to increase the truthworthiness of the data. The first two are discussed in this section, whereas the latter is discussed when reviewing the study's limitations (see Section 4.9).

Before and during the qualitative data collection, certain steps were followed to increase the validity and reliability of the data. First, in order to avoid being influenced by personal bias, general indicators taken from the survey results were used to inform the interview schedule. For example, I had some knowledge of the meanings of entrepreneurship, but I let the survey results direct me to the meanings chosen by the participants and took them into consideration while articulating the interview questions. Second, these interview questions were reviewed by my two supervisors and piloted (see Section 4.8) before the actual interviews were undertaken.

Third, survey indicators were again consulted and referred to during the interview data analysis and discussion stage to detect any consistencies or contradictions when questions were shared between the interviews and the survey. For example, a question regarding the perception that religion encourages entrepreneurship was included in all 58 interviews, yet it was also in the survey, which had 727 respondents. Finally, to increase transparency, this chapter provides a clear description of the steps taken in

⁶⁵ Validity is the extent to which results measure what they are supposed to measure, and reliability is the extent to which results can be reproduced under same conditions (Hammersley 2007).

conducting the research, employing the research methods, getting access to participants, and applying ethical conduct.

4.4.2. Survey

Likewise, the researcher was aware of the strengths and weaknesses of employing the survey method in research. This type of method uses blocks of concepts which can be measured by certain indicators. This measurement is advantageous because it is a consistent device for capturing respondents' opinions (Kelley et al. 2003). This was evident in the measures (e.g., portions of students' reporting their career intentions following graduation) used to provide an explanation of the students population's attitudes towards entrepreneurial activities and SME start-ups – as the purpose of the survey. These survey questions were informed by the literature review in Chapter 2.

The survey's weakness was that it gave general indicators of attitudes and perspectives (De Vaus and de Vaus 2013) but not much information about how and why these attitudes were formed. For example, I identified the common reasons students to prefer a certain sector (see Figure 6.5), but I could not find out why and how these reasons were constructed. The interview process helped me collect this type of data. These survey data were superficial yet important in giving me a sense of what to expect when I started my interview, thereby helping me formulate firmer interview questions, as already noted.

Another drawback of the survey is that respondents are directed to specific answers. Also, according to Stefan Debois (2019), participants may produce dishonest answers due to social desirability bias or produce unconscientious responses due to feeling less obliged and committed. In order to increase validity and reliability, the following steps were followed. First, before the data collection, and to reduce subjectivity, survey questions and items were cross-checked by a survey expert from Cardiff University and a PhD researcher at the same university who also used the survey method. In terms of content and clarity, the survey questions and items were cross-checked by a local expert in the Oman HE sector. Then, the survey was piloted before the final survey was distributed (Section 4.8). To increase the survey's transparency I followed a structured set of steps to distribute and administer it (see Section 4.5.2). All these steps, including judgement based on various types of evidence (i.e., supervisors, experts and colleague's review and pilot studies) and checking for consistency across the sample - helped to increase the validity of results.

4.5. Research Methods and Data Collection

This thesis employed primary and secondary data. Primary data was collected through interviews and surveys as discussed in the previous section. Secondary sources were policy and curriculum documents created by MOHE policymakers and HEI managers. The other secondary data used were national statistics, information in reports generated by official Omani organisations such as the National Centre of Statistics and Information the General Authority of SMEs (Riyada), or the Oman Academic Accreditation Authority (OAAA). In what follows, I explain how data were collected from the document review, survey and interviews.

4.5.1. Documentary Review

A review of policy and curriculum documents (see Table 4.1 below) allowed me to grasp a comprehensive understanding of the EEP before running the survey and conducting the interviews. These documents were also revisited during the analysis stage.

Table 4.1 The EEP Policy and Curriculum Documents

Central Institution	Educational Policy Document	Curriculum Document	Other Policy Document
Oman Government and MOHE	Ministerial Decree for all HEIs to implement EEP	- MOHE Guidebook	Tanfeedh, Riyada, Five-Year Plans, Visions 2020 & 2040, OAAA Quality Reports
Study Site		Curricula Document	Activities
Study Site One		- Course syllabus and Textbook of Management Department, College of Commerce - Course syllabus and Textbook of Mechanical and Industrial Eng. Department, College of Engineering	- Sample of course activities and extracurricular activities
Study Site Two		- Course syllabus and Textbook of the mandatory entrepreneurship course for all students	- Sample of course activities and extracurricular activities (e.g., business plans, and start-up projects)
Study Site Three		- Course syllabus and Textbook of the mandatory entrepreneurship course for all students - Course syllabus and Textbook of the elective entrepreneurship course	- Sample of course activities and extracurricular activities - Evaluative survey results of the course

One possible weakness of including a document review is that the documents might be biased (Bowen 2009), in particular, if they only represent one side and come from one source (the MOHE officials or HEI managers). The empirical study examined whether these biases exist by determining if the documents (articulated by policymakers) neglected the voices of students, HEI lecturers, and entrepreneurs.

The purpose of this study is not to analyse these documents⁶⁶ to know ‘these realities’ (Atkinson and Coffey 2004, p.88) as in qualitative content analysis, semiotics, or hermeneutics (see Silverman 2016), but rather to explore what these documents were aiming to deliver. Hence, I identified the programme’s aims and the knowledge and skills it intends to provide through reviewing the main EEP document (the MOHE guidebook) and materials available at three study sites (see Table 4.1 above). A broader document review, including economic plans and visions, was also undertaken to understand when and how Oman’s economic priorities led to the promotion of entrepreneurship and the EEP. These policy documents also helped me learn the government’s policy aims and understandings (partially addressing objective 1 of the thesis), leading to the investigation of the impact of these policies on HE stakeholders (partially addressing objective 2). Curriculum documents also helped me see how each HEI has implemented the EEP. Comparing documents between different institutions to identify their practices is an effective technique (Soffer 1994) which also partially addresses objective 3 (see Chapter 1).

4.5.2. Web-based Survey

A web-based survey was completed by respondents on their own (Bourque and Fielder 2003). This study used a web survey emailed to all students in all 59 HEIs. However, only students at 31 Omani HEIs responded – the non-responding HEIs mostly have not yet implemented the EEP or the gatekeeper, whom I contacted, did not distribute the survey despite my repeated reminders⁶⁷. This group included students who took up the EEP and others who did not. One reason for the use of a web survey is that the target sampling was HE undergraduates aged 18-23. People in this age range have been called ‘digital natives’ and Sheehan and Hoy (1999) have referred to them as ‘online users’. Therefore, a larger response rate was expected compared to other traditional distribution methods such as the post⁶⁸. In addition, not only is the post in Oman poorly

⁶⁶ These documents are written texts that comprise statements by education providers that reflect ‘the social’ and ‘organisational realities of places’ (Atkinson and Coffey 2004, p. 88).

⁶⁷ Being in the UK whilst distributing the survey was a challenge and led to limitations in reaching out to all 59 HEIs.

⁶⁸ Studies similar to this one, e.g., Rakovski and Levy (2007); Denscombe 2010), designed to examine perceptions similar to this study have indicated that there was no significant difference in using traditional (papers) or online surveys as an administration mode. In fact, Carini et al.

administered, but it also is not commonly used among adults let alone the younger generations. Second, an email survey was easier for the researcher to run and administer given that he was in the UK during the time the survey was conducted.

I chose to use Qualtrics for three reasons. First, it permitted an unlimited number of participants. Second, it was easy to send as an online link via email or mobile and was user-friendly, allowing participants to simply fill it in using their mobile, PC, or laptop anytime and anywhere. It also had more features than similar tools, including a variety of question types, different skip and branching selections, and more reporting options. These more advanced tools suited my needs as the survey consisted of different types of questions and some participants (who did not take the programme) needed to skip some items. Finally, a practical consideration was that its use was free of charge as it was supported by Cardiff University for post-graduate students.

The survey was available both in English and Arabic (see appendices 4 and 5). The Arabic version responses exceeded those of the English one (625 vs 102) even though most HEIs use English as a medium for teaching and learning in Oman. Given that I was not in Oman during the survey distribution stage, I followed the steps described below to achieve a high response rate:

- I recruited facilitators⁶⁹ in 20 of the 31 HEIs to help me send the survey via email to as many students as possible.
- 8 of these facilitators confirmed that they distributed the survey in the last 15 minutes of their classes to ensure a higher response rate (the estimated time for completing the survey is 10 minutes). During the pilot phase students could ask the facilitator undertaking the pilot about those parts of the survey that were unclear to them. Only a few questions were raised, providing assurance on the clarity of the survey. This procedure was used for the first 25 survey responses collected. The facilitator reported the queries raised by the students to me.
- I modified the survey based on those few queries before launching the final survey (see the changes made between the pilot (Appendix 4) and final survey (Appendix 5))
- I sent the survey as a link via my mobile phone to my personal network (students, lecturers, friends) and asked them to send it to any student currently enrolled in one of the thirty one institutes.

(2003), who examined HE students' attitudes and experiences, indicated that the online survey mode resulted in more respondents than the paper one.

⁶⁹ Working at Oman TRC allowed me to establish a personal network with many faculty/staff (managers and lecturers) across most HEIs. All lecturers whom I contacted were cooperative as they were PhD students once, and appreciated the need for help in such a situation.

- I sent an email to college deans and department heads (I obtained their emails through institution websites) at the remaining 11 HEIs in which I could not recruit facilitators for various reasons, including distance and lack of institutional contacts. Noticeably, these HEIs produced the fewest responses (see Appendix 9)
- I sent two reminders asking my facilitators, my personal network, and the deans and department heads to send reminders to their student contact list.

The survey received 916 responses in total. The online survey items addressed the study research questions. The first part addressed the first subsidiary research question, which looked at various understandings of entrepreneurialism. Table 4.2 below explains four characteristics of entrepreneurship (see complete survey in Appendix 5) as identified in the literature.

Table 4.2 Comparison between Starting a Business, Innovation, Creativity and Invention

Statement	Meanings	Examples of Key Resources ⁷⁰
Starting and running a business	The process which includes intentions and actual procedures of starting business	(Hatten 2015; Kirzner 2015; Yetisen et al. 2015)
Innovation	Related to implementation and the ability to transform a new idea into business	(Schumpeter 1989; Dubina and Carayannis 2016; Naranjo-Valencia et al. 2018; Thomassen et al. 2018)
Creativity	Related to imagination and the ability to conceive a fresh idea or plan	(Dubina and Carayannis 2016; Tang et al. 2018; Thomassen et al. 2018)
Invention	Novel device or method which can be commercialised in a business	(Dubina and Carayannis 2016; Thomassen et al. 2018; White and Burg 2019)

Although these three concepts (innovation, creativity, invention) may seem to carry similar meanings, some studies have contextualised them differently (Erez et al. 2015). First, the prime difference between creativity and innovation is that the former is the creation of an idea whereas the latter is bringing that idea into the market and making it a product or service. Second, the main difference between innovation and invention is that invention is “the first occurrence” of new idea for a product or process, while

⁷⁰ Some of these sources were reviewed before conducting the survey and some were newly added to confirm the relevance of their meanings to entrepreneurship in the latest studies.

innovation is “the first attempt” to make it tangible, or turn it into a business (Fagerberg 2004, p. 4).

The second part of the survey included items that identified contextual factors drawn from the literature relevant to Oman’s political economy and skill formation strategies which had a bearing on the development of entrepreneurship (see Chapter 6). These factors shape these understandings and student attitudes in general. The third part only targeted students who took the programme because it focused on the EEP’s potential to develop skills and change student intentions. Unfortunately, the number of students who filled out this part was very low (62 out of 727) which means objective 3 and its sub-questions (see Chapter 1) were addressed mainly through the qualitative research. Therefore, the survey data in the third part was used to inform the interview schedule but was not used in the analysis, i.e., for triangulation purposes. As explained in Section 4.4, triangulating requires robust results and 62 responses are insufficient to do so.

The survey had five types of questions to meet the researcher’s needs (see Appendix 5). The first type included a drop-down menu where respondents could choose one option. This was used for introductory questions such as choosing the gender and the discipline of study, etc. The second type of question asked participants to rank their preferences and priorities. The third was a multiple-choice question that allowed participants to select more than one option. This was needed to inquire about why someone chose his/her major or why he/she preferred to open a business post-graduation, for example. Fourth, there were Likert Scale questions which measured the extent to which participants agreed or disagreed with a question or statement. This was important for questions which rated agreement and disagreement with opinions regarding the entrepreneurial environment in Oman, for example. Finally, an optional question was included for those who wanted to express their opinions freely regarding what initiatives might help to expand the private sector in Oman (see Appendix 5 for the full version of survey questions and items). The semi-structured interview elicited more in-depth answers and found out why students think about entrepreneurship the way they do (see Chapter 5). About 25 responses were used in a pilot survey to test the following:

1. Reliability by checking participant understanding in completing the survey (see how survey was distributed and managed in Section 4.5.2). This was done by the assistance of facilitators who went through each item with the participants, asked questions to check their full comprehension of each item, and allowed the opportunity for participants to ask for clarification. Facilitators recorded which items had ambiguity and required rewriting and sent their observations to the researcher.

2. Translation accuracy by comparing understandings between Arabic and English responses.

The above issues were cross-checked and no major issues with them were found, through some minor adjustments were made. For example, I added definitions of innovation and creativity as the pilot survey indicated that respondents seemed confused between these two terms.

4.5.3. Semi-Structured Interviews

Thirty two HE students who took the EEP, fifteen faculty/staff of managers and lecturers who designed and taught the EEP, ten Omani entrepreneurs and two policymakers within and outside the education sector were interviewed. The use of semi-structured interviews was particularly appropriate for the study because they generated rich data regarding EE stakeholder behaviours, perceptions and experiences (Luo and Wildemuth 2009). This type of interviewing helped ensure questions were focused but not totally open-ended because the answers would have been too difficult to interpret in the data analysis stage. Semi-structured interviewing lets us address key questions but allows space for further enquiry and to gather additional information (Luo and Wildemuth 2009).

I made sure to leave plenty of room for the informant to talk spontaneously without any constraints or interruptions. This allowed possible new themes to emerge and evolve throughout the conversation. The following steps describe how the interviews began for all informants in the four categories:

- A. I started with informal questions such as: How are you? How is your study/work going?
- B. I thanked the informant for volunteering their time for this interview. Then, I briefly explained the purpose of the research, went through the participant information sheet, obtained a signed consent form, and asked permission to record the interview (see Section 4.7).
- C. I then conducted the interview (see Semi-Structured Interview Items in Appendix 7).
- D. At the end of the interview, I informed the subject that he/she could withdraw at any point of the interview or choose not to answer some of the questions asked. I thanked the informant for his/her valuable participation, and I informed him/her that I was going to transcribe this interview and send it to the interviewee for his/her review in case if he/she would like to modify/comment on/delete anything. In addition, I told the informant that he/she could decide to withdraw from the study at a later date and I would delete all the data I collected.

I made sure to collect experiences and perceptions in a relaxed environment. Student interviews took place on the university campus, either in the library/learning centre, a coffee shop, or in facilitators' offices. I had telephonic interviews with two students and one entrepreneur due to the distance of the interviewees' location or upon his/her personal request (see Table 4.6 of interview venues, dates and times). I let other stakeholders decide on the interview location (see Tables 4.4- 4.6 for more details of interviews venues). This allowed the informants to express freely who they were, what they thought (perspectives), and what they wanted to do (intentions).

The construction of the interview schedules started from the general to the specific, which echoed the order of research objectives and questions (see Chapter 1). It started by exploring entrepreneurship understandings and characteristics, contextual specificities such as the entrepreneurial environment and social and cultural aspects and ended with enquires about the EEP. The interview was tape recorded, transcribed, and translated, and HE students and faculty/staff were given pseudonyms to ensure anonymity. Both records and transcription were kept securely (see Section 4.7 for further details). Interviews were undertaken in either English or Arabic based on the interviewee's preference (see Section 4.9).

I used the first interviews for each group (except for policymakers) as pilots, as Table 4.3 below shows. This helped me slightly modify the interview questions, e.g., two items were added (see Appendices 6 and 7 for the difference between the pilot interview schedule and the actual one).

Table 4.3 Distribution of Pilot Interviews

Group	Number	Gender
Students	4	2 males and 2 females
HE Managers and Lecturers	2	1 male and 1 female
Entrepreneurs	1	1 female
Total participants	7	

In addition, the pilot helped to capture the frequency of some of the initial themes that deserved more emphasis and required the addition of additional sub-questions to the final interview schedule (see differences between the pilot interview schedule in Appendix 6 and the final schedule used in Appendix 7).

4.6. Access and Selection of interview participants

Determining the locations where the sample would be found (either physical or virtual) was the first step to start access negotiation. To do so, I recruited "gatekeepers", who facilitated access (Namageyo-Funa et al. 2014, p. 10). In order to find these gatekeepers,

I used my personal contacts and officially approached the HEI administration to obtain gatekeeper recommendations. These gatekeepers helped in supplying me with student emails for both survey distribution and interview arrangements. The interviews were undertaken in the three study sites (see Table 4.5).

There is no perfect way to achieve a perfectly representative sample (Marshall 1996) and this is particularly true in the restricted timeframe of a doctoral programme, when research is undertaken by a single researcher, and when the study targets diverse sets of participants. I worked, first, to select HEIs by using three variables. These are (1) the status of the university/college, (2) whether the programme is compulsory or elective, and (3) the type of university, (public or private).

First, this strategy took into account the hierarchical structure of Oman's higher education sector. At the top is Study Site One, the leading HEI in the country in terms of research activities, the number of staff, the number of students, the number of colleges, and the percentage of national budget expenditure. Excluding this HEI in an educational study conducted in Oman would have made the largest and most significant institution in Oman's higher education system absent. Including Study Site One meant excluding non-vocational subjects as Study Site One does not yet require the EEP for students in non-vocational fields. If non-vocational students were counted, this would have increased the coverage of disciplines of study. Even so, I decided to include Study Site One in my hierarchical sample as a top Omani HEI, alongside one mid-level and one low-level institution.

Second, given that the EEP is compulsory in some HEIs⁷¹ and an elective in others, I chose HEIs or colleges within institutions which require the EEP. This is because this study looked for student perspectives on entrepreneurship and their relation to the EEP. Students who take the programme as an elective are already looking for and highly interested in gaining these skills. Thus, most of their perspectives are likely to be positive unless there is an issue with programme delivery quality. I was also interested in students who are required to take the course to see if they endorse it, reject it, or have no opinion about it, and how it has influenced their views of entrepreneurship.

Third, including a private institution was important. Given that there are 21 private HEIs out of a total of 59 in the country, excluding these meant neglecting around a third of Oman's HE sector. Out of the 31 responding HEIs, 12 were private HEIs making up 38% of the total responding HEIs. About half of private HEIs have made the EEP compulsory.

⁷¹ Or mandatory in some departments and as an elective in others within one HEI, such as Study Site One. MOHE enforced all HEIs to offer the EEP as mandatory. However, some HEIs stated that they need more time to do so.

As most of these HEIs have been recently established, they are low-ranked. Choosing one of them to represent the low-ranked HEIs helped achieve consistency when selecting a hierarchical sample given that 65% are public HEIs represented by two sites and 35% are private HEIs represented by one site.

I used three measurements to rank the HEI study sites, for the purpose of identifying the quality of education each HEI provides and profile of students entering that HEI. This helps to compare the impact of quality on students' development of entrepreneurial intentions and skills. First, I reviewed reports issued by the National Standard of Academic Accreditation Authority (2018) which address the quality of Omani HEIs. Second, I used the MOHE statistics which show which of these three sites are the top preference for students with the highest post-basic education grades. Third, I included other variables such as the date of establishment, public (generous financing) or private (expected difficulty in financing), and the profile of faculty/staff qualifications, or whether or not they hold PhD degrees. The above ranking was made in 2016 before starting my fieldwork. When reviewing the above mentioned reports in 2020, Study Site Three had improved to overtake Study Site Two. This can be noted in the analysis chapters where Study Site Three appears to perform better with regards to delivering the EEP. On reflection, post-research, this would make Study Site Three the medium-ranked HEI and Study Site Two the lower-ranked HEI. This change in ranking is noted here and in Chapter 8. I did not change the 2016 rankings, i.e., Study Site Two remains as the medium-ranked HEI and Study Site Three as low-ranked HEI – this reflects their ranking at the time the research was conducted.

Finally, in addition to having confidence that these HEIs are illustrative of Oman's HE system, I took into account accessibility and manageability in terms of geographical closeness, which made it easier for me to commute to them on a daily basis during the data collection phase. The following section gives a brief description of each site.

4.6.1. Study Sites

a) Study Site One

This is the highest ranked HEI according to this thesis's ranking. Study Site One is the first and only government university located in the capital. It has nine colleges with different disciplines. The EEP is compulsory in only two departments where my interviewees enrolled in: (1) the Department of Management at the College of Commerce and Political Studies and (2) the Department of Mechanical and Industrial Engineering at the College of Engineering. The programme is offered as an elective in all other university programmes.

b) Study Site Two

This mid-ranked HEI is one of six under the supervision of Oman Ministry of Manpower. Students who were not admitted to Study Site One or do not receive external scholarships usually enrol at this college. This college offers applied sciences majors such as engineering, and arts and humanities programmes such as business, accounting and human resources (see Table 4.6). My interviewees were enrolled in business/management and mechanical engineering programmes.

c) Study Site Three

This is the lowest level HEI in the study. The admission criteria are far lower than for Study Site One. The MOHE offers various vocational and non-vocational majors and provides internal scholarships for lower-performing students to attend this HEI. In addition, some students pay their own expenses through family funding or bank loans. At this HEI, the EEP is required for all majors. To align with the other study sites, my interviewees were enrolled in management/business and engineering programmes.

d) Ministry of Higher Education (MOHE)

This is the key government ministry that initiated and designed the EEP and is managing, supervising, and evaluating its implementation. The MOHE was independently mandated as the only official entity for higher education in January 1994 by Royal Decree 2/1994. Its main goals are to develop an overall administrative framework in response to higher education needs, particularly the growing demand for seats. Alongside supervising all 26 private universities and colleges, there are six applied sciences colleges under the jurisdiction of the MOHE. It also manages scholarships awarded to students to study in-country and abroad.

e) Oman's Small and Medium-Sized Enterprises Sector (SMEs)

The ten interviewed entrepreneurs were drawn from the SME sector. The current percentage contribution of Oman's SMEs to the country's GDP is 15% (Riyada 2018), employing 40% of Oman's total labour force, although only 3% of that labour force was made up of Omanis as of 2014 (Al-Barwani et al 2014). However, only 5% of this workforce are Omani nationals, according to Al-Barwani (2014). According to Al-Barwani (2014), the Ministry of Commerce and Industry in Oman used two key criteria to define SMEs: the number of employees and sales turnover (see below Table 4.4).

Table 4.4 Types of Businesses in Oman

Category	Number of Employees	Financial Capital (OMR)
Micro-Business	1 to 5	Less than 100,000
Small-Business	6 to 25	100,000 to 500,000
Medium-Business	26 to 99	500,000 to 3,000,000

Source: Public Authority for Small and Medium-Sized Enterprises Development 2018 (Riyada)

This study found that over 50% of SMEs in Oman are Micro-Enterprises. In addition, the study identified some characteristics of the majority of current Omani entrepreneurs: they have a high school diploma or higher, are 30 or older, have at least one-year's work experience, and only 20% of them have received formal training related to SMEs. Finally, not all of these owners work full-time for their businesses as about 55% have full-time jobs alongside operating their businesses. These characteristics were important for informing the selection of Omani entrepreneurs for this study, as discussed in the following section.

It is important to note that the number of SMEs is only one possible measurement of entrepreneurship as there are other critical indicators that can be used to measure entrepreneurship (as discussed in Section 2.5.2). In Oman, however, such measurements are not available and policy documents link entrepreneurship activities to the existence of SMEs only. This is also reflected in how Oman understands entrepreneurship (Chapter 5).

4.6.2. Interview Participants

Among the three sampling categories (individuals' characteristics, individuals as informants or representatives, and individuals as case studies) defined by Blaikie (2009, p. 164), the study used 'individuals as informants or representatives' and 'individuals' characteristics'. That is, participants were selected based on certain criteria to address the research questions, as explained in the following sections.

The initial plan was to sample (15) HE lecturers, (30) students from the three HEIs, one manager from each HEI (total of three), (4) high level policymakers, and (10) entrepreneurs from the SME sector for semi-structured interviews. Considering the aims of this research and the qualitative data I wished to collect, these numbers were large enough for robust analysis but 'small enough to be manageable' (O'Leary 2013, p. 183) for a PhD timeframe. These participants were selected based on certain criteria and characteristics (see the introduction of this Section 4.6). Some changes occurred during

the fieldwork phase, particularly regarding the students, which does not affect the analysis' robustness, as the following section explains.

The level of gender balance in the student population was included as a variable because all HEIs in Oman are co-educational, and national policies and strategies ensure equal rights for women (see Chapter 2). In some HEIs, especially private, the enrolment of female students sharply exceeds that of males, as is the case in Study Site Three which has 67% female enrolment (Oman National Centre for Statistics and Information 2018). Including females enriched the study in permitting the comparison of results according to gender. However, there are far fewer Omani female students in vocational subjects, particularly engineering, similar to the situation in other countries (Carberry and Baker 2018). Finally, I interviewed students majoring in management/business, and engineering subjects across three study sites to establish a pattern of disciplines of study that can be reasonably compared.

4.6.2.1. HE Students

In order to select participants, I included a survey question which allowed respondents to express interest in being interviewed. From the students who volunteered for interview participation I chose students who met four criteria: enrolled at one of the specified three study sites (4.6.1), had taken the EEP, were required to take it, and majored in business/management or engineering. The key reason for selecting these subjects was that they are the top priority of Oman's current skill formation strategy to meet the demand of the labour market and replace expatriates with Omani workers in the private sector, as explained in Section 3.3.3. I chose participants who met those criteria, sending interview invitations to an equal number of male and female students from each study site, even if the gender distribution of students varied by site. For example, if one site was 80% female, I still invited 50% females and 50% males for the sample. The interviews were conducted with those individuals who were contacted and accepted the invitation. Given that the number of students accepting to be interviewed (54) who met an institution's criteria (see section 4.6) and participant characteristics, explained in this section, was higher than my target number, I had to randomly choose (32) students. The fieldwork phase ended up including 2 more females than initially envisaged, as Table 4.5 below shows. Some of the facilitators who helped distribute the survey aided me in getting enough students to fulfil my target number⁷².

⁷² Facilitators are the heads of the business and engineering departments at the three main study sites: Study Site One, Study Site Three, and Study Site Two. Those facilitators had access to all of the students in these two disciplines. Therefore, they helped me recruit students who took the Programme and ask them if they would like to participate in my research. Then, I was given their

Table 4.5 Comparison of Interviewed Students between Initial Plan and Actual Fieldwork

Study Sites	Major	Initial Plan		Actual Fieldwork		Change
		Number	Gender	Number	Gender	
Study Site One	Management/ Business	4	2 males 2 females	5	2 males 3 females	1 extra female
	Engineering (Mechanical)	6	3 males 3 females	5	3 males 2 females	1 less female
	Engineering (Petroleum)	0	-	1	Male	1 extra male
Study Site Two	Business	4	2 males 2 females	4	2 males 2 females	No change
	Engineering	6	3 males 3 females	8	4 males 4 females	1 extra male 1 extra female
Study Site Three	Engineering	6	3 males 3 females	2	0 males 2 females	No males 1 less female
	Business	4	2 males 2 females	6	3 males 3 females	1 extra male and 1 extra female
	Medicine	0	-	2	2 females	2 extra females
Total	30: 15 males and 15 females			32: 15 males and 17 females		

Source: Interview data

Table 4.5 above illustrates three aspects in which there were modifications compared to what was initially envisaged: number of students, gender, and major. These changes were minor and did not affect the robustness of the sampling structure. In fact, some of these changes subsequently proved useful. For example, increasing the number of students was useful for the analysis (Chapters 5-7) as they are the main EEP stakeholders and represent the main study population. The main question seeks to determine the EEP's potential to develop skills, and students who have taken the programme are a key group to reflect on this question. I interviewed two additional students to substitute for a shortage of faculty/staff in comparison to the expected number fourteen instead of the fifteen initially anticipated to be available (see Table 4.7). The tight schedule of a PhD project did not allow for time to arrange more lecturer meetings (there were 7 cancelations). The snowballing technique, which was effective in

contact details to arrange meeting appointments with them. Indeed, this method proved effective in recruiting participants who met the specific criteria.

meeting the target number of entrepreneurs, also helped improve recruiting enough participants from other groups: students and faculty/staff.

Table 4.6 Distribution of Students by Institution, Major, Gender and Interview Venue

Institution	Major	Pseud.	Sex	Age	Interview Venue	Total			
Study Site One	Mechanical Engineering	Ahmed	M	21	Common teaching room	11 (6 males and 5 females)			
		Salim	M	22	College lobby hall				
		Maher	M	20	College lobby hall				
		Aysha	F	21	Common teaching room				
		Laila	F	21	Common teaching room				
	Management/ Business	Hasan	M	22	College learning centre				
		Anwer	M	21	College learning centre				
		Aseel	F	21	College learning centre				
		Maysa	F	22	College coffee shop				
	Petroleum Engineering	Hala	F	23	Common teaching room				
Bader		M	21	College coffee shop					
Study Site Two	Engineering	Said	M	22	College learning centre	11 (6 Males and 5 Females)			
		Wisam	M	21	College learning centre				
		Khalid	M	21	College learning centre				
		Waleed	M	20	College learning centre				
		Marya	F	19	College learning centre				
		Ameera	F	20	College learning centre				
		Sarah	F	21	College learning centre				
	Business	Hamad	M	22	College learning centre				
		Fahad	M	21	College learning centre				
		Gana	F	22	Lecturer office				
		Manal	F	21	Lecturer office				
		Study Site Three	Business	Nora	F		20	Lecturer office	10 (7 Females and 3 Males)
				Dalal	F		19	University library	
Nima	F			21	University library				
Saoud	M			35	University library				
Nasser	M			34	University library				
Issa	M			22	Lecturer office				
Engineering	Azza		F	21	Over the Phone based on her demand				
	Nahla		F	21	College Classroom				
Medicine	Raya	F	22	College Library					
	Omima	F	23	College Library					
Total						32			

Source: Interview data

All students were full-time Omani undergraduate students currently enrolled at HEIs located in Oman. 'International' students were not included because this study explores the understanding of entrepreneurship by people (Omanis) who have been living in 'a rentier-state' economy since birth and thereby have (likely) developed a rentier mentality (see Chapter 3). The student sample did not identify a specific age range as long as the student was at the undergraduate level. The only two students outside the typical undergraduate age range interviewed were from the private HEI (see Table 4.6). This is normal as public universities have stricter rules for accepting mature students. Usually

these universities accommodate students who come directly from secondary school into higher education, i.e., young students who have just finished grade 12. Including only two mature students from Study Site Three was in line with the relatively small number of these students across both the Omani public and private HEI sectors (Oman National Centre for Statistics and Information 2018). Although the thesis included students from a variety of socio-economic backgrounds⁷³, there were very few from the wealthiest one, and those that did participate were only at Study Site One. This group consists mainly of students whose parents work as top-ranking government officials (ministers, advisors, etc.) or are owners of large companies. There are relatively fewer students of this background at Omani HEIs because their greater economic means and privileges enable the majority tend to study abroad.

Finally, although most Gulf Cooperation Council students (including Omanis) would prefer to study abroad⁷⁴, only 0.3% of Omani students do so (UNESCO 2020) because tuition in many other countries is beyond most Omani families' financial capacity. While government scholarships are available, they are limited and highly competitive (1.643 in 2017) (Oman Higher Education Admission Centre 2017). Wealthier students, who study abroad, attend expensive international primary and secondary schools, helping them obtain high post-basic education scores. A few of them enrol in Study Site One, given that it is an 'elite' university. This explains why few of these wealthier students are included in this study.

4.6.2.2. HE Faculty/staff (Managers and Lecturers)

This was the second largest group of study participants (consisting of HE managers and lecturers) because they are next in the degree of relevance to the research question. Those who teach in the EEP should be well-informed about the curriculum's strengths and weaknesses. Table 4.5 below shows that the number of HE managers designing and directing the EEP is relatively small, reflecting the small size of this group in general. The number of lecturers is higher, but still it is smaller than the amount specified in my initial data collection plan (see Section 4.6.2). All manager and lecturer interviews took place either in their offices or in a department/college meeting room as Table 4.7 shows. This gave the interviewees more privacy and ensured a friendly, quiet atmosphere where participants could talk freely and express themselves.

⁷³ Barely any research has discussed socio-economic status or social class in Oman. I attempted to divide students in this study into two groups: the majority who have a similar economic and social standing and the minority who have a high social position and financial income.

⁷⁴ This is due to academic reasons like the possibility of attending high-ranking HEIs and having better prospects post-graduation, as well as non-academic reasons like the desire for adventure and learning a new culture (David et al. 2017).

Table 4.7 Distribution of Interviewed Faculty/staff by Gender, Institution, and Qualifications

Institution	Position	Category	Pseud.	Gender	Qualification	Total
Study Site One	Head of Dept. College of Commerce	Manager and lecturer	Sultan	Male	PhD	Gender: 10 Male and 4 Female Manager only category: 3 Manager and lecturer category: 5 Lecturer only Category: 6
	Assistant Prof., College of Commerce	Lecturer	Eman	Female	PhD	
	Assistant Prof., College of Engineering	Lecturer	Musab	Male	PhD	
	Head of Dept. College of Engineering	Manager and lecturer	Tameem	Male	PhD	
Study Site Two	Assistant Prof. Business Dept.	Manager and Lecturer	Basma	Female	PhD	
	Assistant Prof. Business Dept.	Lecturer	Humaid	Male	PhD	
	Lecturer at Business Dept.	Lecturer	Moza	Female	MA	
	College Dean	Manager	Zainab	Female	PhD	
Study Site Three	Assistant Prof. College of Economics	Lecturer	Faisal	Male	PhD	
	Assistant prof. College of Economics	Lecturer	Khalifa	Male	PhD	
	Assistant Dean, College of Business	Manager and Lecturer	Hadi	Male	PhD	
Additional Site A	Vice Chancellor	Manager	Marwan	Male	PhD	
Additional Site B	Head of Management Department	Manager and Lecturer	Hamdan	Male	PhD	
Additional Site C	Manager of Entrepreneurship	Manager	Mansoor	Male	PhD	
Total						14

Source: Interview data

Table 4.7 above also shows that one manager from each study site and two from additional sites were interviewed. These interviewees explained the ways that their HEIs modified the EEP specifically for their institutes. Understanding their perspectives of their programme's teaching methods, curriculum, and activities and rationale for developing them helped draw comparisons and contrasts with other HEI managers' views. Furthermore, the managers' perceptions about entrepreneurialism (not only the programme) were important as they are direct stakeholders and heavily engaged in the study's objective.

HE manager and lecturer recruitment was voluntary. Possible candidates were identified and contacted via email by deans or department heads at my request based on their involvement in the entrepreneurship programme and availability during the data collection period. As Table 4.7 above shows, gender was considered when applicable, but there was not an equal number of male and female faculty and staff member participants. It is worth noting some managers are categorised as managers and lecturers because they also teach. On the whole, given the number of faculty/ staff interviewed, analysis of this group (in the following chapters) was generic for the whole sample across the three study sites. It was possible to compare students from different HEIs as the number of students was larger (32) because they were the main study sample.

4.6.2.3 Policymakers

The third group is policymakers. Table 4.8 below shows the number of policymakers involved in designing the central policy. I interviewed two policymakers introduced to me via my personal network. A face-to-face meeting with each one was arranged by phone. While I had intended to interview more policymakers, I was unable to do so. That is because this group composed of is high-profile officials with whom it is extremely hard to arrange an appointment. The waiting time for a response to an appointment request was between four to six weeks. One of the policymakers cancelled the interview appointment three times resulting in an extended wait of another six weeks. Another policymaker who I planned to interview cancelled five times and the last cancellation was final with no rescheduling.

Table 4.8 Distribution of Policymakers by Job Title, Gender, Institution, Qualifications, and Interview Venue

Category	Job Title	Gender	Institution	QA	Interview venue	Total
Policy-maker	Director General	Male	Ministry of Higher Education	PhD	Participants' offices	2
	Acting Director General		Supreme Council for Planning	BA		

Source: Interview data

As Table 4.8 above shows, one policymaker from the MOHE was involved in this process while the one from the highest planning authority was not. Access to this stakeholder type is restricted and can be extremely difficult to obtain. Gender cannot be applied as a criterion for selection here because none of the seven members of the committee that established the programme were female (see Guidebook in Oman Ministry of Higher Education 2015). The second policymaker from outside HE to whom I could get access was also male. Conducting interviews in the participants' offices with closed doors provided a more comfortable and private setting for me and the participants. The conversations were casual and informal, which was what I intended.

4.6.2.4. Entrepreneurs

The final group was entrepreneurs. Sampling entrepreneurs was important in order to inform the first subsidiary research question which seeks to explore the wider meanings of entrepreneurship in Oman. This group also spoke about the experience of being an entrepreneur in Oman more generally, including what made them become entrepreneurs and what obstacles they have faced in the market (see Chapter 6). Given this group's secondary significance in informing the first and second research objectives and considering the central importance of HE students and faculty/staff, the decision was made to interview ten entrepreneurs. Ten was a convenient sample size to inform the wider meanings of entrepreneurship and the impact of context. This number would have been larger if some of the entrepreneurs had taken the EEP in order to assess the programme's potential, which is the main enquiry of this thesis. The number of interviews undertaken for this study was already large (58) and adding more interviews particularly from a secondary group, would have been difficult within the timeframe of a PhD.

Table 4.9 The Distribution of Entrepreneurs by Field, Success/Fail Rate, Gender, Qualification and Interview Venue⁷⁵

Field	Success/ Failure ⁷⁶	Gender	Qualification	Interview Venue
Construction	Failure	Male	school Dip	Participant house
Design and Architecture	Success	Male	MA	Participant office
Architecture	Success	Female	BA	Participant office
Construction and design	Success	Male	BA	Participant office
Educational services	Success	Female	MA	Coffee shop
Food Services and Café	Failure	Female	MA	Coffee shop
Oil Services	Success	Male	MA	Telephonic interview
Services	Failure	Male	High Dip.	Telephonic interview
Beauty Salon	Failure	Female	BA	Participant office
Oil and Training Services	Success	Male	PhD	Participant office
Total	10 (4 females and 6 males)			

Source: Interview data

As Table 4.9 above shows, the sample included an almost equal number of males and females. A snowballing technique was used to identify these ten participants, particularly as there was no obvious accessible frame for this population (e.g., a contact database) from which I could find the targeted entrepreneurs. Hence, this approach was the only feasible one, allowing me to make initial contact with one participant and using him/her to establish contact with his/her counterparts. Success and failure in their entrepreneurial efforts were considered here because successful entrepreneurs explained what might work whereas the failed ones revealed what might not work. Generally, the percentage of failed SMEs is higher than that of the successful ones, as some studies have shown (e.g., Collett et al. 2014; Marom and Lussier 2014).

Three of the entrepreneurs had already been exposed to some of the EEP's content because students within their families took the programme and were able to provide them with programme materials. These interviewees were better able to reflect on it (see

⁷⁵ It was intended to include social entrepreneurs (see definition in Section 2.6.4). However, this type is not classified in any policy documents and not recognised by the SMEs community in Oman. Therefore, due to the lack of classification of this type of entrepreneur in Oman data, the attempt to find some to include in study sample was unsuccessful. Inclusion of this type of entrepreneur would bring a new perspective in exploring entrepreneurship understandings and thereby should be considered in future research.

⁷⁶ The determination of success or failure is made based on the interviewees themselves. Two of them said that they have shut down their businesses, Two said that they are in the process of closing their businesses and one is thinking seriously of selling her business due to insufficient profit to cover rent and other expenses.

Chapter 9) than the other 7 who only commented on the general idea of introducing such an academic programme. Seven entrepreneurs indicated that they have taken some sort of training, workshops, short courses, or read/watched some learning materials (though not through an academic course like the EEP), that allowed them to comment on the impact of training/self-learning generally. Successful entrepreneurs shared “stories” about starting and running an SME, but also how an educational programme would have helped them to be more successful. Finally, they were able to suggest ways to improve the EEP and the broader entrepreneurial Omani environment (see Chapter 9).

Regarding interview locations, some interviews took place in a friendly, relaxed environment such as a coffee shop or house, as shown in Table 4.9 above. Interviews which occurred in participant offices also felt unpressured despite occurring in a busy workplace like a company or display hall. No interviews were disrupted except for one when the participant was called out of the office to sort out a work-related issue. He returned to the interview half an hour later, so I had to remind him where I had left off when he was called away.

4.7. Ethics

This study followed British Sociological Association (BSA) guidelines in communicating with research subjects. First, ethical approval was received from Cardiff University, School of Social Sciences. Second, permission was granted to gain access to the MOHE to execute the interviews. Third, to build rapport with participants, I made sure to give participants information sheets (see Appendix 1 for English and Arabic version) and obtained a signed consent form (see Appendix 2 for English and Arabic version) before starting the interview. As for the online survey, the participant read the project information online and declared agreement with the content of the consent form by ticking a box – instead of signing- before starting to fill in the survey. Each surveyed and interviewed subject was informed as to the purpose and nature of this research. As for the interview, I made it clear to the interviewees that they could stop and leave the interview at any time. Any survey participant could email the researcher if she/he was unwilling for her/his responses to be used in the study. Luckily, none requested withdrawal post participation. Moreover, I informed them that the interviews would be taped and transcribed and that they could always request copies of their transcribed interviews. Finally, there were no ‘ethical’ concerns in the forming of either the survey items or the interview schedule given that all sample group participants were legally adults (age 18 or above) and could make their own choices about answering the research questions.

4.8. Data Analysis

This section outlines my analytic approach, explaining my choice of descriptive analysis for the survey, and for the interviews, thematic and theory-based analysis combined with a data-driven approach (open coding). Analysis is a creative process of interpretation (Denzin 1989) and “an individualized” process (Warren and Karner 2005, p. 190), in that certain types of logistics suiting the researcher and research are used. One important consideration I kept in mind as I proceeded with my qualitative analysis was that a real interaction happened between the interviewer (me) and the interviewees. That interaction involved asking, responding, speaking, and listening, resulting in gaining knowledge which was not only the respondents’ “understanding of the social world” but which was also affected by “the time and place of the interview” (Warren and Karner 2005, p. 202). In other words, the same interview questions might have produced different data if they had been asked in a different time or place (country).

Additionally, other factors have been proven to influence this study interviewees, e.g., social class, age, and gender (e.g., Warren and Karner 2005; Ritchie et al. 2013). The latter was considered in this study (see justification in sampling Section 4.6). Social class was not included in the analysis because most of the participants were from a similar social background⁷⁷. Finally, participant ages could have been significant, but this aspect was not measured due to lack of data. As Table (4.6) shows, interviewing only two mature students (aged 34 and 35) did not allow for comparing their perceptions (hence age impact) with the other 30 students (younger than 23).

More importantly, before starting the analysis process I needed to immerse myself in these textual data, the interview extracts, through extensive reading followed by intensive re-reading through translating and transcribing interviews. This constant reading and rereading aimed to develop a conceptual understanding of “what” this data comprises and “how” it would answer my research questions.

As a novice researcher, I chose to use thematic analysis due to its reputation for flexibility, simplicity, and quick learning time (Braun et al. 2019). Furthermore, it can help examine the perspectives of different types of participants, capture similarities and differences between them, and allow unanticipated themes to emerge (Braun et al.

⁷⁷ Social class is incidental in Oman (and hence this study) as there is little research which has examined this issue. A study by Al-Abri (2018) argued that education quality is affected by rural and urban differences and by social status. According to Al-Abri (2018, p.44), those “in remote areas in Oman are often neglected by those at the central level” and therefore better education is provided in major cities. Further, in Oman those in powerful positions such as tribal leaders, politicians, and wealthy businesspeople form an upper-middle social class and thereby are given more public privileges (high level quality schools, special wards in hospitals, etc) than ordinary citizens (Rippenburg 1998).

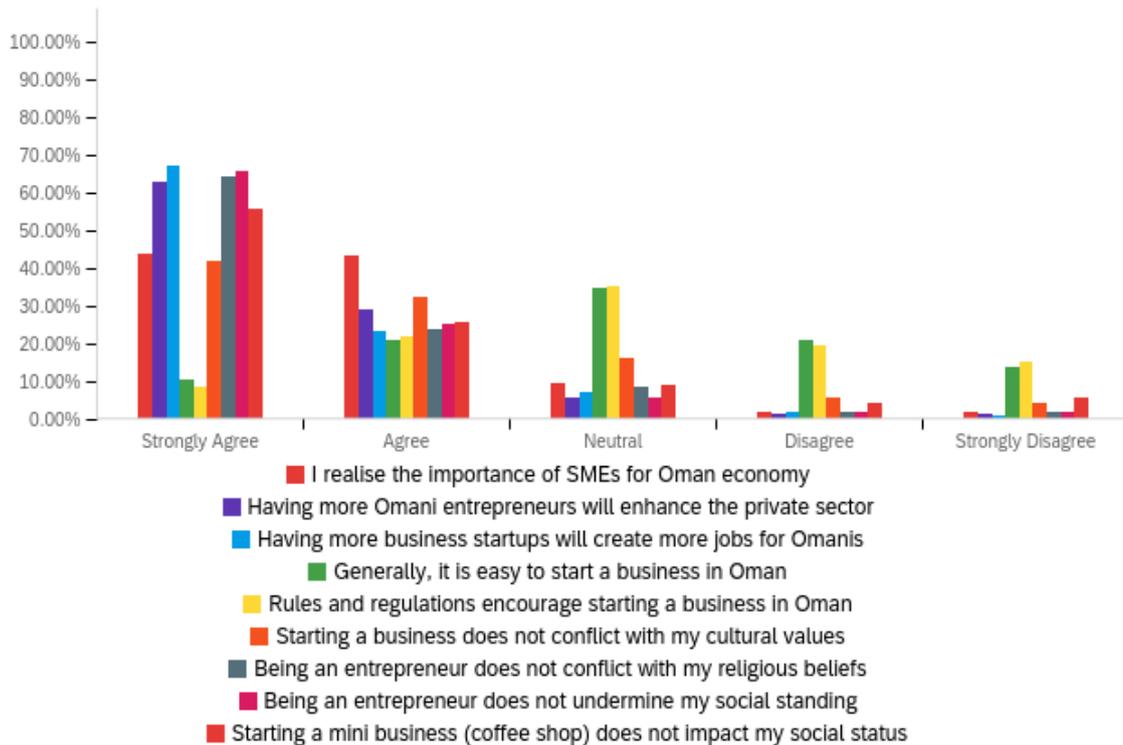
2019). However, it has been argued that the flexibility of this method may lead to a lack of coherence and inconsistency in the themes coded from the raw material (Holloway & Todres 2003). One way I dealt with the possible lack of coherence, was constantly referred to my research questions to keep me on track. I therefore used the relevant themes for this study and worked to make them logical by expanding on their explanations and making them consistent.

4.8.1. Survey: Descriptive Analysis

The aim of descriptive analysis is to convert information from rough data to meaningful percentages and frequencies (Loeb et al. 2017). No other types of analysis were needed based on the survey's purpose (see Section 4.3) and since the survey was a secondary method in this study. The final survey was distributed to 31 HEIs and 916 responses (471 female and 445 male) were recorded. The Statistical Package for the Social Sciences (SPSS) was then used to run a descriptive analysis. Below I present analysis examples used to inform the interview schedule. Part of this survey analysis was published in peer reviewed conference proceedings (Al-Shabibi et al. 2017) (see Appendix 8).

The survey gave a number of measurements in terms of the entrepreneurial environment, economics, policies, and cultural and social factors, as Figure 4.1 below shows.

Figure 4.1 Significance of Entrepreneurial Environment in Oman



Total respondents: 727

Source: Survey data

First, this formed a basis for the interview schedule by providing a general picture of the entrepreneurship climate in Oman and drilling down on what makes stakeholders think entrepreneurship is important and why. For example, I crosschecked the assumption that entrepreneurship is important for Oman’s economy (see Figure 6.2; see also Chapter 2). Also, this helped in identifying where Oman is perceived to be strong (e.g., positive perception of entrepreneurship and its significance for the economy, the private sector, and job creation), as well as Oman’s weaknesses (e.g., complex rules and regulations). As such, additional interview questions were articulated to address questions such as: Why is entrepreneurship significant for the economy? Why does entrepreneurship expand the private sector and create jobs? or Could you elaborate on why rules and regulations are obstacles for starting a business?

Second, some of the items in the survey shown in Figure 4.1 above were mentioned by interviewees spontaneously. If there were contradictions between survey and interview results on the same item (e.g., importance of entrepreneurship for Oman’s economy), another analysis would be needed to uncover these conflicting results. However, the data analysis revealed no contradictions between the survey and interview findings.

4.8.2. Interview: Thematic Analysis

The following steps were followed while undertaking the analysis. First, I drafted a preliminary code list based on the research questions and literature review but did not initially use it. Instead, I started to find new codes from the data using NVivo and categorised them into subthemes. Then, the preliminary codes were entered into NVivo and compared with the data-derived code list. These two lists of codes were combined by selecting the most frequent codes that evolved from the data and which were most relevant to study's enquiries, resulting in a final analysis template of themes and subthemes (see Appendix 10 for Preliminary Theme list A, Data Theme List B, and Final Analysis Template C).

The open coding applied to all 32 student interview transcripts produced key themes such as the social aspect of understanding entrepreneurship, individual needs, e.g., gaining more money, self-satisfaction due to becoming an entrepreneur, impact of place of residence, and so forth (see Chapter 7). These themes were identified in the literature elsewhere, but the open coding allowed to confirm their relevance in the Omani context (see Chapter 5).

Among various strategies for analysis such as grounded theory, narrative analysis, critical discourse analysis, and qualitative content analysis, this study used thematic analysis for three reasons. First, the research questions (and indeed the key literature review) indicated themes and subthemes (e.g., entrepreneurial skills, values, knowledge, environment etc.) represented in a matrix or a framework for a thematic analysis approach (Boyatzis 1998; Braun et al. 2019). That did not mean, however, that I needed to limit my analysis to these themes and subthemes. Indeed, I needed to eventually be open to adding new ones which emerged out of a thorough reading of the interview transcripts. Critical discourse analysis and narrative analysis do not allow such an opening to new emerging themes (Riessman 2005; Sliverman 2016).

Second, this study did not intend to generate a theory, as the grounded theory approach generally tends to attempt. Carrying a genuine grounded theory requires more practicalities and interplay of data collection than undertaken for this thesis (Charmaz and Smith 2003). In addition, despite the fact that both thematic analysis and grounded theory use coding (Braun et al. 2019), the latter approach tends to turn data into fragments, and thus 'the properties and interconnections between codes' which entail 'dimensions of a broader phenomenon' might have been lost (see Coffey and Atkinson 1996). Thematic analysis codes text in a matrix, so these dimensions were easily seen from the beginning. The use of a matrix in thematic analysis also helped to indicate where in the transcript the fragment comes from.

Thematic analysis is widely used in works adopting different epistemological foundations and addressing different qualitative research questions (Nowell et al. 2017). Boyatzis (1998, p. 4) defines it as “a process for encoding qualitative information”. Coding is at the centre of this process and it can involve themes, indicators or something in between. Coffey and Atkinson (1996, p. 27) defined coding “as a way of relating our data to our ideas about these data”. In other words, it is the ability “to see” and “to see as” (Boyatzis 1998, p. 10). Every analytic approach has its own drawbacks and that is the case with this method despite its popularity in qualitative research. Projection is the most common problem, i.e., projecting the researcher’s own values, characteristics, emotions, and even attitudes onto those being researched (Guest et al. 2011). Another one is subjectivity, which can be a result of the researcher’s mood and style. Both these negative aspects can be reduced if the researcher has an adequate level of patience and a tolerance of ambiguity in dealing with such high amount of raw information and concepts (Guest et al. 2011).

Using NVivo (a qualitative data analysis computer software package produced by QSR International) helped in analysing a large amount of text (around 450 pages of interview transcripts). NVivo proved very helpful in terms organising and saving data effectively. Indeed, this researcher and others (e.g., Bazeley and Jackson 2013) have affirmed its effectiveness not only in data management but also in the identification of new ideas. Second, coding is how the researcher “translates” the data and gives meaning to each “individual datum” for the purpose of identifying patterns, categorisation, and other analytic processes (Saldaña 2015, p. 4). There are different approaches to coding reflecting the nature of each research design and the researcher’s preference and/or epistemological position. The three main coding approaches can be summed up as (1) theory driven, (2) prior data driven, and (3) data-driven (see Boyatzis 1998).

My research design necessitated combining theory driven and data-driven approaches. The first approach assumes that the code is developed based on the literature review, e.g., HCT, skill formation, entrepreneurship and EE. As referred to in the methodology, the research questions were finalised after a thorough review of the literature and on the basis of existing theoretical and conceptual frameworks. Then, these research questions were incorporated into the semi-structured interview questions/items. This led to constructing codes heavily influenced by the research questions and literature review and indeed the study’s theoretical and conceptual framework.

As mentioned in Section 2.5.4 in Chapter 2, Hofstede’s theory is employed to fit this thesis method approach. First, for a theory-based approach, Hofstede’s work has been widely used in studies which examined generally the effects of culture and society on

people's values, mindsets and behaviours (see for example Wu 2006; Hofstede 2011; Yoo et al. 2011). Second, for the data-driven approach, I chose when analysing the data, the usefulness of Hofstede's theory of cultural dimensions became even more evident. Two key themes emerged from this thesis data: Risk Aversion (Section 4.6.1) and Individualism (Section 4.6.2) in Chapter 6 which align with two out of five Hofstede's six cultural dimensions: "Individualism vs. collectivism" and "Uncertainty avoidance" (Hofstede 2011, p.2). Third, there is little research which connects Hofstede's cultural dimensions with studies which examine EE (Carayannis et al. 2003), and which this thesis aims to add as a contribution.

Combining the theory driven approach in defining "pre-determinants" in the survey and interview profile with the data-driven approach⁷⁸ proved useful in this study. In other words, I had a list of themes (used as codes) derived from the literature (see Preliminary Literature Theme List in Appendix 10). However, I did not use this list at the beginning of the analysis (themes were not entered in NVivo), but rather I tried to find themes that emerged from the data (see Data Theme List in Appendix 10). I did this because, as mentioned earlier in this chapter, this thesis adopted an inductive approach which searches for "patterns" in collected data.. A data-driven approach or "open-coding" helped develop a general conceptual understanding generated only from the data itself as an essential initial stage of analysis and helped include possible important themes that could otherwise be missed (Warren and Karner 2005, p. 191). Furthermore, I felt that I needed to be "highly sensitive" to the raw material from my data collection at least at the beginning before exposing myself to any literature or, as Boyatzis (1998, p. 30) calls raw material, "intermediaries". Boyatzis (1998, p. 30) saw this method as a "contaminating factor" that can lead to coding previously recognised themes. Although the pre-themes were identified from the literature, I preferred to start my analysis by listening to what my data were saying and letting it drive me to the themes without preconceptions. After all, this is a study looking for new patterns and aiming to contribute knowledge to the field.

4.9. Interview Transcription and Translation

I chose to transcribe and translate all interviews in full, as opposed to including parts of the interviews based on their relevance to the research enquiries. This guaranteed that no important data were missing. Table 4.10 below shows the number of interviews conducted in English and Arabic.

⁷⁸ The process of developing this conceptual understanding is called "Analytic descriptions/patterns" or "Typologies", which involved identifying general themes or patterns and representing them cohesively (Warren and Karner 2005, p. 190).

Table 4.10 Distribution of Interviews by Language

Group	Interviews in English	Interviews in Arabic	Total
Policymakers	1	1	2
HE students	2	30	32
HE managers and lecturers	15	0	15
Entrepreneurs	2	8	10
Total			58

Source: Interview data

First, the interviews (conducted in English) were directly transcribed by me. Second, I transcribed the interviews conducted in Arabic word for word in the original language. The transcribed interviews (in Arabic) were translated into English by a professional translator. Transcribing interviews word-for-word allowed the analysis to be applied to the participants' exact words, with nothing being modified or lost in translation. Also, this ensured that "identity/culture" of language was not omitted (Temple and Young 2004, p.174), including Omani slang or idiomatic expressions. Temple (2002) raised some of issues that could arise when employing a translator who might interpret meanings differently. To address such concerns, all transcribed and translated interviews were reviewed thoroughly by myself with the assistance of my wife who is a bilingual medical doctor (she obtained her MD at a university which uses English as a medium of teaching). Reviewing by myself (being that Arabic is my mother tongue and English is my second language) was important particularly as the translator was not Omani and did not understand some of the Omani slang words. My review was done by listening back to the recordings and making sure that the translation was sufficient and expressed the ideas included in the recordings. I also have some experience in translation (Arabic to English and English to Arabic) as I worked as a part-time translator in a private enterprise for 3 years at one point in my career.

Finally, interview extracts were selected for analysis Chapters (5-7) based on relevance of the speaker's words to the point discussed. This was determined using NVivo tools such as word frequency and text research. Second, I made sure to include a balanced number of extracts from students and faculty/staff from the three study sites, successful and failed entrepreneurs, education sector policymakers and those outside it, and finally both genders. This was done by giving each participant a pseudonym (see Table 4.6) to demonstrate how many different perspectives were to be drawn upon. However, these two criteria for inclusion were relaxed on a few occasions. For example, more students from Study Site One talked about risk-taking for certain reasons (explained in Chapter 7) than those at the other sites. Also, policymaker perceptions could not be included in

some discussions, such as those about skills or curriculum content, given that they talked about broader topics.

4.10. Critical Reflections and Method Limitations

This section reflects on some data collection aspects which have some implications for the study's method and analysis. The first important reflection is that the mixed methods approach employed contributed to the robustness of the results. The survey filled in the gap as there were no statistics available that could have provided the basic information the thesis needed in order to inform the interview schedules and analysis. For example, I needed to know students' general post-graduation career intentions to inform my discussion of their level of engagement with entrepreneurial activities, and their much documented preference for government jobs (The Oman National Centre for Statistics and Information, 2018). This then helped determine the EEP's potential for forming student attitudes. Also, the survey gave me a sense of which concepts students associate with their understandings of entrepreneurship. This proved useful in tightening up the focus of the research before conducting the interviews. Second, although the survey response rate might have been higher had I been in the country during distribution, the 916 responses obtained from 31 HEIs were still satisfactory⁷⁹. Distributing the survey link via email, social media, and mobile SMS as well as recruiting facilitators to help manage this process proved effective.

Third, although soliciting volunteers to participate in interviews proved effective in getting access to students (see Section 4.6), the student interviewee number was still below my target. Due to time restrictions, I had to use snowballing, which appeared to be a quicker approach to reach those remaining students and achieve my target number. I asked some interviewed students if they knew anyone who would also like to be interviewed for this study. Three of those students helped me get the contact numbers of four (the required number) of their classmates. Although this is not a limitation per se, it indicates that the researcher always needs to have a backup plan (an alternative data collection method) as the intended method might not work .

Fourth, despite having anticipated hardship in finding female participants, in fact the final sample consisted of more female than male student participants, as shown in Table 4.5. There are two reasons for this. First female student enrolment in Oman's HE sector is greater, particularly in private HEIs. As seen in Table 4.5, there were 7 female student interviewees versus only 3 males at Study Site Three⁸⁰. Second, the number of females

⁷⁹ The total number of Omani students in 31 HEIs is estimated to be 35,000 (Oman Ministry of Higher Education 2018). 727 respondents were satisfactory for this survey's secondary purpose (see Section 4.4.2).

⁸⁰ The percentage of female students at this HEI is 80%, as is the case at most private HEIs.

who agreed to be interviewed was unexpectedly high. One possible reason for this is that despite being well-informed of female HE enrolment dominance prior to starting the fieldwork, I was over-stating the cultural barrier (expecting Muslim females to not want to be interviewed by males). I realised that I am not fully aware of the cultural change towards more gender equality and participation.

Another incident which supports this idea is only one of the female students selected for interviews ultimately declined participation, despite some studies asserting that Muslim female students might be uncomfortable being interviewed without the presence of a family member or close female friend. 'As an "insider" to the study context, this was unsurprising to me. Regarding the student who declined participation, she did so after learning that the interview would be tape recorded. The facilitator forgot to inform her about this, and when the student was informed by the interviewer she looked unhappy and called her husband. When she returned, she said that her husband did not wish her to be tape recorded. Given that it was not difficult to find another female student who would not mind being tape recorded, I decided not to carry on with the interview. A similar incident occurred with one key male policymaker who refused to be tape recorded. I was not surprised by his request considering the sensitivity of his position and his place of employment. In addition, my options here were more restricted, unlike the situation with the students, so the interview proceeded without recording.

Fifth, the distribution of subjects according to field of study shifted slightly from what was initially planned. As shown in Table 4.5, the most obvious change took place at Study Site Three, where there were more female participants, as well as only three males from business and no male engineering students. Unexpectedly, I found out too late that there were no male students registered at the college of engineering. This possibility had never occurred given that this institution is one of the biggest private universities in the country and engineering is a discipline widely preferred by males. Furthermore, I had already interviewed half of the students at this HEI I had planned to speak with, and it thus appeared to be illogical (with the lack of time) to approach another private HEI and re-start the interview process. This change was a sampling limitation.

To compensate for this student shortage, I increased the number of business students interviewed (one additional male and one female). I worked to add more subjects from this discipline or more female students from engineering but that did not work out despite my facilitator's dedicated cooperation with me. In order to reach the target number of 10 students from this HEI, I had no option but to interview two female medical students who indicated a lot of interest in talking about their experiences, shedding some light on one

important higher education discipline. This can be a potential future area for EE research.

Furthermore, one main limitation of a qualitative study is the difficulty of generalising its findings to other settings, which in this study means other rentier- state contexts such as the Gulf countries (see more explanation in Chapter 9). This is because the ontological and epistemological position of the qualitative researcher necessitates believing in multiple realities, and these constructed realities reflect the unique nature and breadth of the specific context under study, thereby restricting generalisability to other contexts (Denzin and Lincoln 2011). Being wary of this limitation made me more attentive to the kind of data I was collecting. I thereby tried to avoid over- or underestimating these data and attempted to be more realistic and neutral during the data collection, analysis, and discussion processes.

Finally, my positionality as an insider created many positive aspects, e.g., easy access, understanding of language, familiarity of HE system etc, yet this positionality requires a professional reflection. Whilst I am not employed in the HE sector, the interviewees (particularly the faculty/staff) were aware of my employment in The Research Council (TRC), , which is a government organisation, and my role in awarding funding to HE institutions. This could have led the faculty/staff to report more positive views on the EEP (a government-led programme) to me and not be seen as someone who criticises government. This perhaps explains the HE faculty/staff bias towards endorsing the EEP's implementation (see Chapter 7). This should be kept in mind when interpreting the results. However, this was not applicable to the main study group, the students, as most of them (as reported during the interviews) have not heard of TRC and were not aware of what it does.

4.11. Conclusion

The aim of this research is to examine the potential of an entrepreneurial education programme to develop entrepreneurial skills and contribute to Oman's economic diversification. Using the programme as a lens, perceptions of four of the programme's main stakeholders- policymakers, HE faculty/staff, HE students, and entrepreneurs - were collected. A mixed method approach was employed but a qualitative method was prioritised, while the quantitative method was used mainly for informing the main method's data collection and for triangulation purposes. Semi-structured interviews and surveys were the two methods of data collection. Thematic analysis was employed for the former and descriptive analysis was used for the latter.

Constructionist and intereprevist positions were taken throughout the data collection and analysis. This allowed me to exercise caution regarding my cultural insider status and treat the data as multiple truths which carry meanings and realities. The fieldwork reflects the difficulty, in a few cases, to meet the target number of stakeholders, yet this did not significantly impact the robustness, validity, and trustworthiness of the data. This experience is also a reminder to be flexible and prepare back up plans for data collection. The following is the first analysis chapter, which addresses study objective 1.

5. Chapter Five: Understanding Entrepreneurialism in a Rentier State Context

5.1. Introduction

This chapter addresses the first research objective and its two sub-questions (see Chapter 1). It defines entrepreneurialism and its key characteristics in the rentier state context of Oman, according to the views of those interviewed and surveyed for this thesis, and other sources of evidence. Included were: HE students, and EEP lecturers, perspectives from policy documents and their policymakers, curricula and managers who created them, as well as active entrepreneurs. In what follows, I discuss these data within the context of the extant literature on entrepreneurialism to help situate entrepreneurialism understanding within Oman's rentier state environment.

The chapter is organised as follows. Section 5.2 identifies entrepreneurship meanings based on a review of the documents studied. Section 5.3 contrasts them with participant interpretations and explores how the study's four interviewee groups – in relation to entrepreneurial meanings discussed in Section 5.2 - interpreted entrepreneurship definitions and skills. Section 5.4 describes conceptions and characteristics of entrepreneurialism in Oman based on the empirical findings and compares them directly with Oman's rentier state context.

5.2. A Documentary Review: Meanings of Entrepreneurialism

This section explores how Oman's policy and curriculum documents (see Table 4.1 in Chapter 4) define entrepreneurship and explain its purpose. This entailed a review of the Oman Ministry of Higher Education Guidebook (on Entrepreneurship and Innovation), the main policy and EEP structure document, and the three study sites' curricula. Additionally, content from Oman's five-year plans and Vision 2020 (see Chapter 2) are included to highlight the country's broader economic intentions. I then move on to compare the perspectives that emerge from these documents with those held by the study's stakeholders. This, in turn, leads to some reflections on the development of the EEP and the extent to which it is likely to be a viable policy to meet the government's policy aims.

This documentary review reveals that Oman has adopted entrepreneurship for two main purposes: i) to contribute to a wider economic diversification strategy and, ii) push the Omanisation process. Since the beginning of this century, entrepreneurship has become more evident in policy documents such as various economic plans and Visions 2020 and

2040. The economic purposes of entrepreneurship are also reflected in other policy documents and initiatives outside of education, and it is the economic aspect of entrepreneurship that tends to dominate over others. For instance, The Public Authority of SMEs has been established to develop and accelerate the establishment of SMEs to diversify the economy and create sustainable jobs for Omanis. Job creation might be viewed as a social aspect, but as will be shown the discourse, in Oman policy is much more orientated towards the 'economic' understandings, aims and benefits of entrepreneurship than political, social, and public aspects discussed in the literature (see Chapter 2).

5.2.1. Entrepreneurship Meanings in EEP Policy and Curriculum Documents

The entrepreneurship guidebook which the MOHE obliged all HEIs to follow defines entrepreneurship in a purely economic way, as follows:

'Entrepreneurship is the dynamic force through which economies develop and progress. Through innovation and creativity, individuals and companies drive growth and wealth creation. This role emphasizes the importance of the environment in which entrepreneurship is cultivated, namely the Small and Medium Enterprises (SMEs). These enterprises are the nuclei of creativity and innovation which drive the process. Therefore, a great importance is placed on SMEs as dynamic and vibrant channels through which further economic development and diversification can take place' (Oman Ministry of Higher Education 2015, p. 3) .

This statement could be largely expected given that initiating such a programme is in line with Oman's broader economic goals: becoming less energy-dependent and creating private sector employment (Tanfeedh 2017). Given that Oman is a monarchy, the directive of the Sultan, the highest authority, is to be responded to fully and urgently by all concerned entities. Therefore, the emphasis on an economic purpose can be seen in the main policy document's five learning objectives for the EEP:

- Develop a mindset of appreciation of *business venturing* and the entrepreneurial process, its risks and rewards.
- Develop an appreciation of the impact of entrepreneurship and innovation on the *local and global economies*.
- Develop a clear and structured understanding of a *business plan*.
- Understand the support systems available to new *business ventures* in Oman.

- Recognize, engage and interact with entrepreneurs within the local community.
[Oman Ministry of Higher Education 2015, p. 8. My emphasis]

As seen in objectives one, three and four, the purpose of developing entrepreneurial mindsets and understandings is to start business ventures - not only locally but also globally, as objective two states.

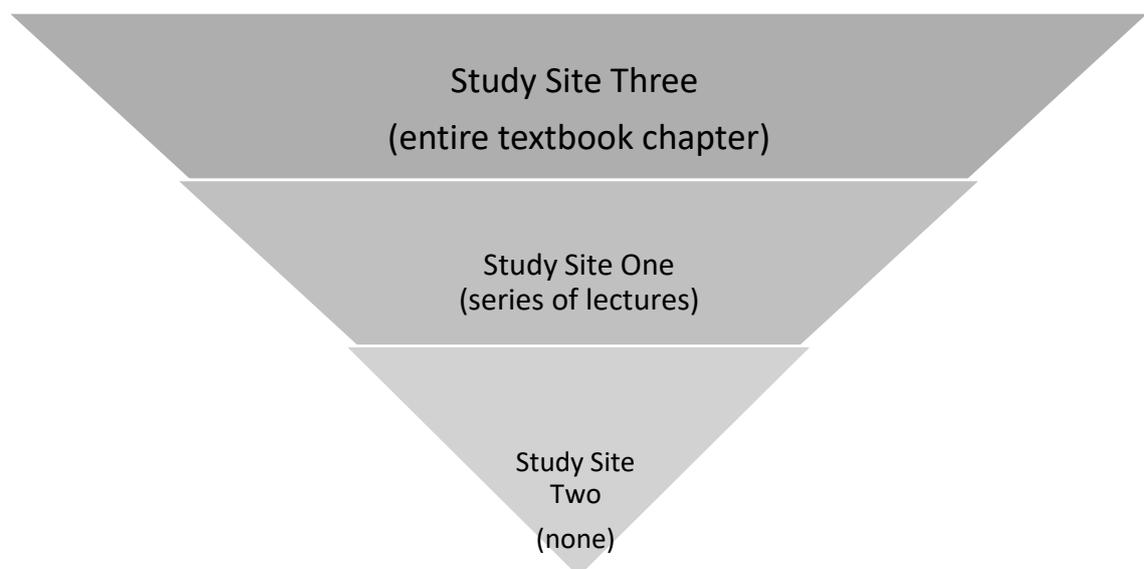
Other non-economic meanings, e.g., social meanings, are hardly stated as concepts in the MOHE guidebook. The only place a 'social element' is mentioned is here:

The course will provide [...] with the basics of entrepreneurship and innovation and make them appreciate its importance and impact on the economy and the social fabric of society [Oman Ministry of Higher Education 2015, p. 5]

Despite scant mention of "social" aspects in the EEP Guidebook, some social purposes/meanings are included. For example, the fifth objective (see above) makes reference to the "local community". Also, in EE policy, one of the main aims for developing entrepreneurship and EE is to create jobs which address social issues in Oman, e.g., creating a source of income for people to be able to get married, have families, and avoid social problems which unemployment causes (see Tanfeedh 2017).

Social meanings are evident in two of the study sites' curricula, indicating disparities in implementation of the programme, i.e. institutions can adapt it to their individual needs. This social aspect varies from one curriculum to another (see Figure 5.1 below).

Figure 5.1 Coverage of the Social Meanings of entrepreneurship Across the Three Sites



Source: Observed from the three study sites' syllabi

The study sites' syllabi show variation in the inclusion of social aspects in their curricula. Whilst Study Site Three introduces a whole chapter about social entrepreneurship and Study Site One includes it as a topic in some lectures, there is no inclusion of this topic in Study Site Two. This variation in the inclusion of social aspects is expected, in part, as a result of the policy allowing HEIs some scope to design the curriculum in ways that fit with their particular interpretations of the directives for programme delivery (as Chapter 7 discusses). However, the government's economic focus remains strong and the following section discusses how HE students and faculty/staff are impacted by the emphasis on economic meanings and imperatives in policy and curriculum documents.

5.2.2. EEP Content and its Impact on HE Stakeholders' Entrepreneurship Understandings

This section discusses the views expressed by the study sample (including those from outside HE sector, i.e., entrepreneurs) on the impact of the EEP on HE stakeholders. It is clear from the data that their perspectives are in line with EEP policy and curriculum documents and show an emphasis on economic understandings of entrepreneurship. Typically:

I think this programme will be one of the reasons to increase entrepreneurship and SMEs in Oman. Many students will start thinking of self-employment and perhaps open a business when they graduate. Many of these students know how hard it is to get a job nowadays. [Waleed, male student from Study Site Two, (engineering), interview in Arabic]

All of the students from Study Site Two and most from Study Site Three (lower ranking institutions) discussed entrepreneurship emphasising 'economic' imperatives. Most students from Study Site One (highest ranked institution) appeared to have more comprehensive understandings encompassing economic and non-economic dimensions. There are some synergies with arguments made later in Chapter 7 of this thesis, which shows that the higher the HEI level/ranking, the more informed and rounded are student understandings of entrepreneurship.

Generally, most faculty/staff indicated a major focus on the economic purpose of the programme, with minor focus on non-economic aspects. This lecturer and department head states:

Yeah, regarding the entrepreneurship subject, we have to stick to certain outcomes of the curriculum, like for example, one of the outcomes, is to link the subject to the vision 2020, the economic vision of Oman. [Basma, female manager and lecturer from Study Site Two (business), interview in English]

However, as with students, there were some differences by institution; some staff from Study Sites One (i.e. three) and Three (i.e. one) held wider understandings, as illustrated in the following quote:

*I am a member of IAE, ICSB (International Council of Small Business). I have attended many conferences in Britain and internationally. So, we are very familiar with entrepreneurship literature and textbooks. Perhaps you are aware that the best schools in entrepreneurship are in Europe and the USA. Babson College in Boston has especially been recognized as one of the best schools in the last two decades and Harvard and other schools have entrepreneurship education. In the European context, in Sweden LIMD is doing good work in entrepreneurship, as are other universities like the University of Stirling in Scotland and Warwick University and Grenfell University [in Canada]. So, I followed their curriculum, I followed Babson's curriculum. At my office I have the whole Babson curriculum. One of the recent courses we have been teaching in addition to entrepreneurship, small businesses, family business creation, and innovation is **social entrepreneurship**. These are our current courses. [Sultan, male manager and lecturer from Study Site One (business), interview in Arabic, my emphasis]*

Other evidence highlights the importance of staff education and qualifications in shaping perspectives on entrepreneurship (and thus the curriculum). Several faculty/staff at Study Site One and one from Study Site Three hold entrepreneurship PhDs, including in social entrepreneurship, and this has clearly shaped their views. I might have expected staff with entrepreneurship qualifications to make reference to broader entrepreneurship understandings, and this became evident in the shape and form of the curriculum introduced (the absence of similarly qualified staff at Study Site Two and the narrowness of their curriculum is also telling). This is important because a wider curriculum including social enterprises can help to improve society and also develop the economy in the long run (Pache and Chowdhury 2012).

Finally, the interviews with the entrepreneurs did not reveal any non-economic purposes/meanings in their perceptions. They see the EEP quite singularly as a means to learn how to start up a successful business:

Even if the student becomes a doctor one day, he/she might start his/her own clinic. If you study labs and medical analysis, you may start your own laboratory, run a successful business. [Successful female entrepreneur (education sector), interview in Arabic]

As one might expect, the entrepreneurs, as owners of businesses, possess a business-based mindset. None of them had studied entrepreneurship in an academic-based programme, as the data shows (see Table 4.9 in Chapter 4 for details on the educational background of interviewed entrepreneurs). If social entrepreneurs had been available for interviews, then this might have produced different perspectives (see Section 4.6.2.4 in Chapter 4).

Prioritising the economic purpose of teaching and learning entrepreneurship coincides with numerous studies that indicate a dominant economic purpose for initiating EEPs elsewhere (e.g., Sánchez 2013; Martin et al. 2013; Fayolle and Gailly 2015). It is worth remembering that Oman urgently needs to diversify the economy away from rentierism. This key political and economic factor is emphasised in the EEP documents and then transmitted to stakeholders. Furthermore, other factors have some bearing on constructing entrepreneurship understandings and engagement among students due to the nature of Omani society. The impact of these political, economic, and social factors on stakeholder engagement is explored in Chapter 6. The following section discusses stakeholder understandings in more depth.

5.3. Defining Entrepreneurship in Oman: Stakeholder Views

This section presents interviewees' interpretations of entrepreneurship and discusses them in relation to extant literature (Chapter 2) and Oman's policy documents (Section 5.2.1). Its purpose is to develop understandings of entrepreneurship in a rentier state context and begin to pinpoint factors shaping both understandings of, and engagement with, entrepreneurship, which are discussed further in Chapters 6 and 7. The section starts with students, the main study group, followed by other EE stakeholders, including HE lecturers and managers, entrepreneurs, and policymakers.

5.3.1. Students

Students are the main study group and two data collection methods were used to generate data: surveys and interviews. As explained in Chapter 4, whilst the survey gave a general sense of students' understandings and informed the interview schedules, interviews contributed to exploring further aspects of their understandings and how these have come about.

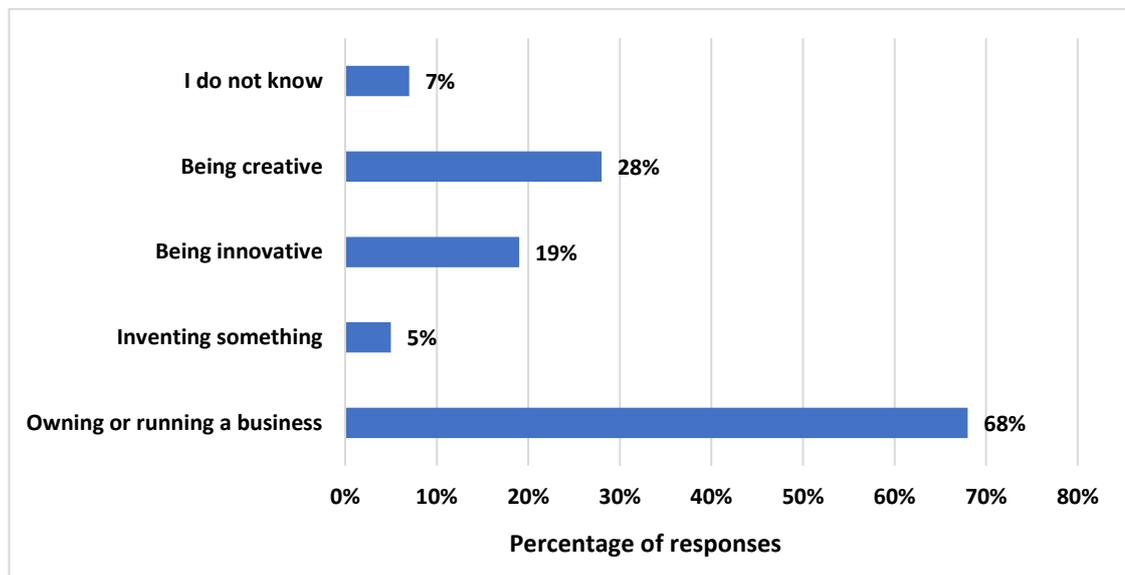
5.3.1.1. Survey Results

This section analyses the quantitative results across variables such as gender and parents' educational level and professional background to the analysis. The chosen variables were based on previous studies similarly analysing factors affecting student entrepreneurial understandings and attitudes (e.g., Oosterbeek et al. 2008; Johansen

2014)⁸¹. Those variables deemed to be potentially important for this study and thereby were included in the survey questionnaire. The survey was mainly a scoping device, but analysis of its data helps triangulate the findings with the interview data. The results are limited, and there were no statistical tests undertaken to confirm or disprove them and thereby should be treated with caution. Nonetheless, they provide some useful insights on how entrepreneurship is perceived by the wider student body (i.e. those both participating and not participating in the EEP) and what might inform marginally differing perspectives.

Figure 5.2 below shows overall percentage of student responses of all categories to the five statements in the survey questionnaire (see Section 4, appendix 5). It appears that a high percentage of respondents associate entrepreneurship with “owning or running a business”, which aligns with definitions discussed elsewhere (Yetisen et al. 2015; Kirzner 2015). Similarly, the linkage of entrepreneurship to creativity and innovation was strong, also as stated in the literature (Schumpeter 2013; Drucker 2014). This indicated that the understanding of meanings of entrepreneurship amongst students in Oman are close to ‘conventional’ understandings.

Figure 5.2 HEI Student Understandings of Entrepreneurship*



Source: Survey data (*) Multiple responses were possible

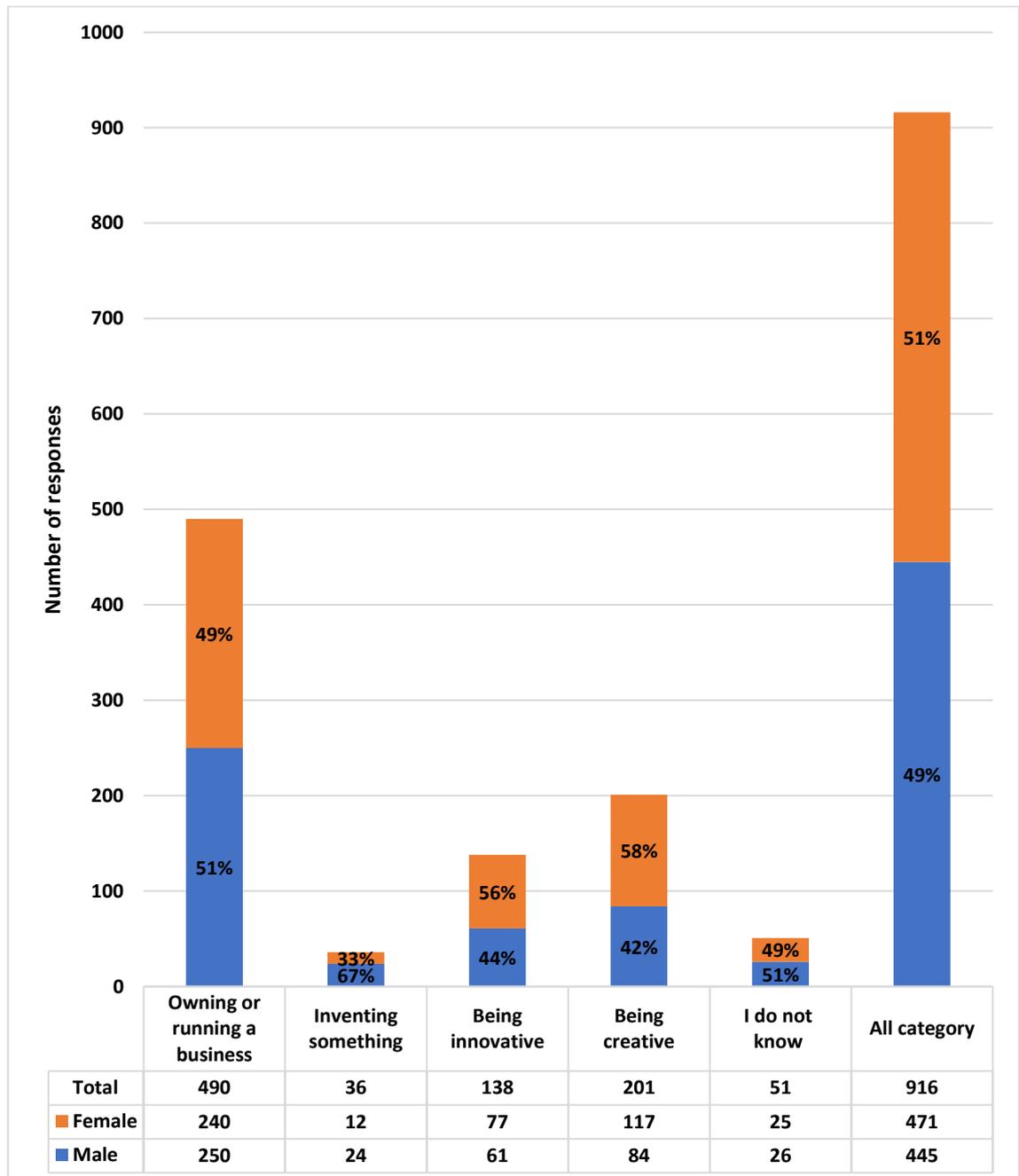
After showing the overall percentage in the above Figure 5.2, the below Figure 5.3, shows the distribution of responses by gender in each of the five statements. When looking at this distribution, there appears⁸² to be a difference in understandings between

⁸¹ Oosterbeek et al. (2008) found that a programme has an insignificant effect on a student's intention to become an entrepreneur and Johansen (2014, p. 155) found that “entrepreneurship projects can be a good teaching method for improvement of academic performance”.

⁸² It is worth reminding that there were no statistical tests undertaken to confirm this difference. It is solely observed through survey descriptive analysis (see Chapter 4).

male and female respondents. As explained in Chapter 2, four characteristics of entrepreneurship were identified from the literature: invention, business start-up, innovation and creativity (Hatten 2015; Dubina and Carayannis 2016; Thomassen et al. 2018). Males ranked invention at the top (67%) while females prioritised the concepts of being innovative (56%), and being creative (58%) almost equally.

Figure 5.3 HEI Student Understandings of Entrepreneurship by Gender



Source: Survey data

Evidently, women involved in the study seem to think more in terms of innovation and creativity when running a business while men tend to think of it as inventing.

A second set of variables to be considered are parents' educational and professional background, as Figure 5.4 below shows. General guidance for how to read graphs 5.4 - 5.7 is as follows: The percentage of respondents for each qualification or work sector category is shown in the first column of the graph. The percentage in each cell refers to the percentage of students who selected each response. As an example, Graph 5.4 shows that 36% of respondents, in the first row to the left, reported that their father did not have any qualifications. On the other hand, 43.8% of the 36% reported that their father did not have any qualifications⁸³, indicating that they interpreted entrepreneurship as "owning or running a business"⁸⁴. To make it clear, putting these percentages into numbers, 36% of the total 702 respondents, or 265, and 43.8% or 113 respondents of latter number 265, said that entrepreneurship means "own or run a business". These 113 respondents were also allowed to select another interpretations such as innovation and creativity. Here, multiple responses were possible. It is important to note that these results are also affected to some extent by the low number of respondents in some categories particularly PhD and Master categories.

In this analysis, I compare the interpretations which indicate a sounder understanding of entrepreneurship (innovation and creativity) and interpretations which are more simplistic (own or run a business). First, looking at Figure 5.4, the modal category for students whose fathers had a PhD degree related to being innovative (63.6%), followed by "being creative." "Owning or running a business" (40%) was the response they selected least often. 60.7% of students whose fathers have a master's degree associated entrepreneurship with innovative, also the model category for these students – compared to "owning or running a business" (35.7%)⁸⁵, which was again the category selected least often. By contrast, students whose fathers had no qualifications related entrepreneurship, most often, to owning or running a business (43.8%) -compared to being innovative (31.2%).

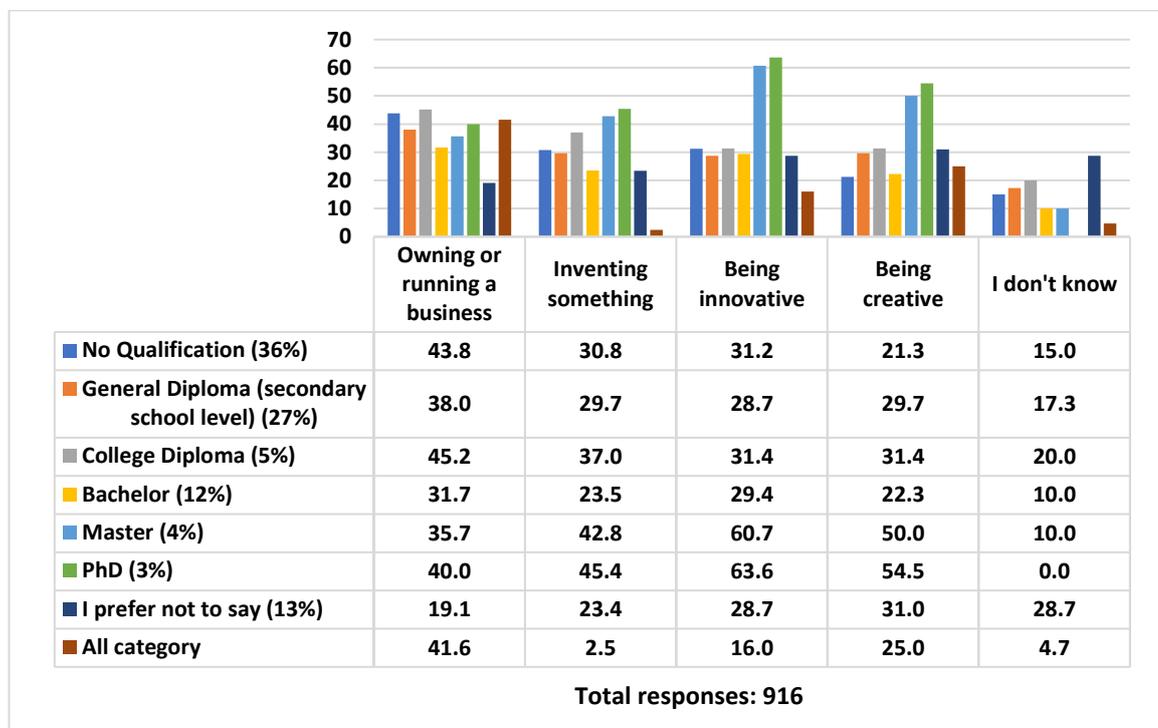
⁸³ Another example in Figure 5.4 is college diploma is 5% (means 35 out of 702 chose this option), out of 35, 15 (making 45.1%) out of 35 chose "own or run a business", 11 (making 31.4%) out of 35 chose "innovation" and so on. These 15 and 11 students may have chosen both options as it is allowed.

⁸⁴ Multiple responses were possible regarding the understanding of entrepreneurship due to an attempt to address one of the survey's weaknesses (discussed in Chapter 4), that survey items were very structured (forcing participants to respond in a limited way). More choices allow respondents to select which conceptions (not restricted in one) are closer to his/her understandings. On the other hand, given multiple response being possible, the students could have repeated answers in various categories which also could affect the results.

⁸⁵ The large number of parents with no qualifications or general diplomas is because the majority of Omani students' parents lack them. Most parents have low or no education due to the fact that pre-1970 Oman was an under-developed country with only 3 schools.

Whilst the differences appear to be moderate⁸⁶, it seems the children of more highly educated parents are more likely to link entrepreneurship to innovation and creativity (see also Chapter 2 on the importance of these elements for wider understandings of entrepreneurship) when compared to those with less well-educated parents. As discussed in Chapter 8, these understandings may lead to general positive attitudes but have limited potential to shift students' intentions to entrepreneurial activities. A study by Schmitt-Rodermund (2004) found that parents' educational level has some impact on developing entrepreneurial interests. However, it did not specify what sort of interest (general attitudes or serious intentions for entrepreneurship), as this study does (see Chapter 8).

Figure 5.4 HEI Students' Understandings of Entrepreneurship by Father's Educational Level*



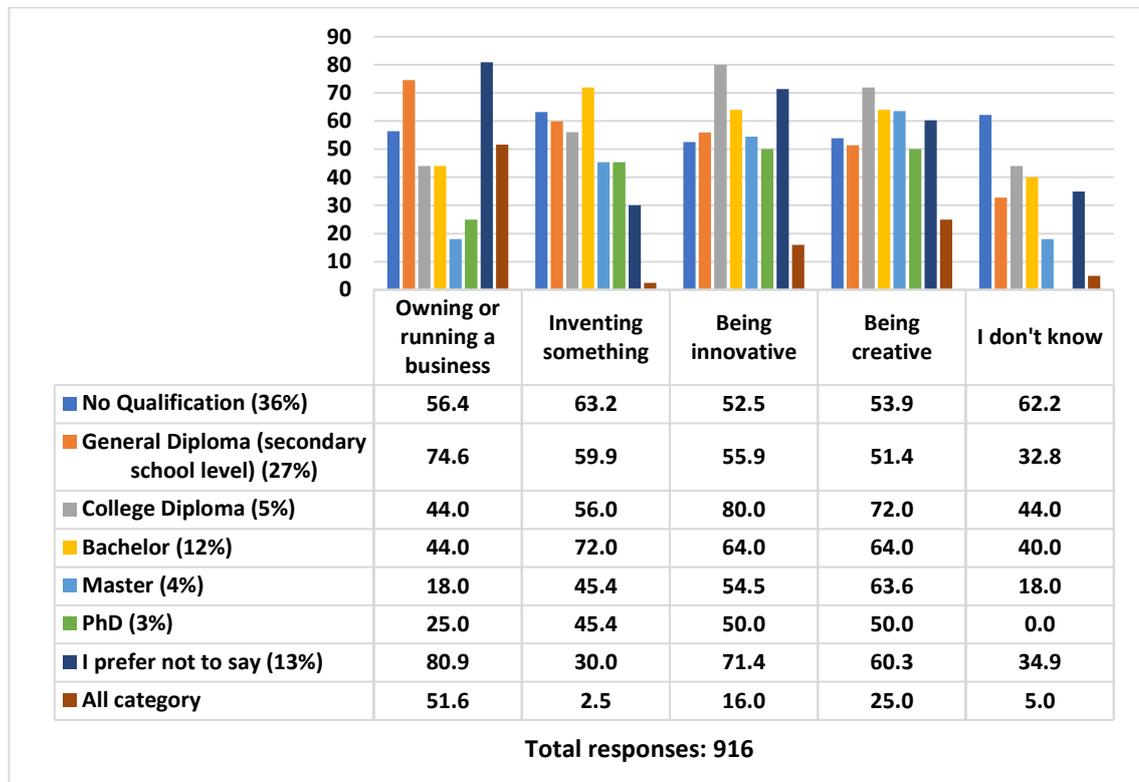
Source: Survey data (*) Multiple responses were possible

Looking at students' understanding of entrepreneurship according to mother's educational achievement, owning or running a business is also frequently associated with entrepreneurship by students with less educated mothers (no qualifications), representing most of the respondents as shown in Figure 5.5 below. On the contrary, "innovation" and "creativity" tend to be more often associated with entrepreneurship among those respondents with more educated mothers. For example, for PhD category, the modal categories are innovation (50%) and creativity (50%) despite that means only

⁸⁶ I emphasise that these moderate differences are observed through a descriptive analysis approach. For this thesis's secondary survey purpose and due to restricted PhD programme timeframe, no statistical tests were undertaken. Future studies may use these survey data to undertake statistical tests and elicit more I emphasise quantitative results.

4 students chose innovation and 4 students chose creativity given that PhD category is only 0.5% or 7 students out of 702.

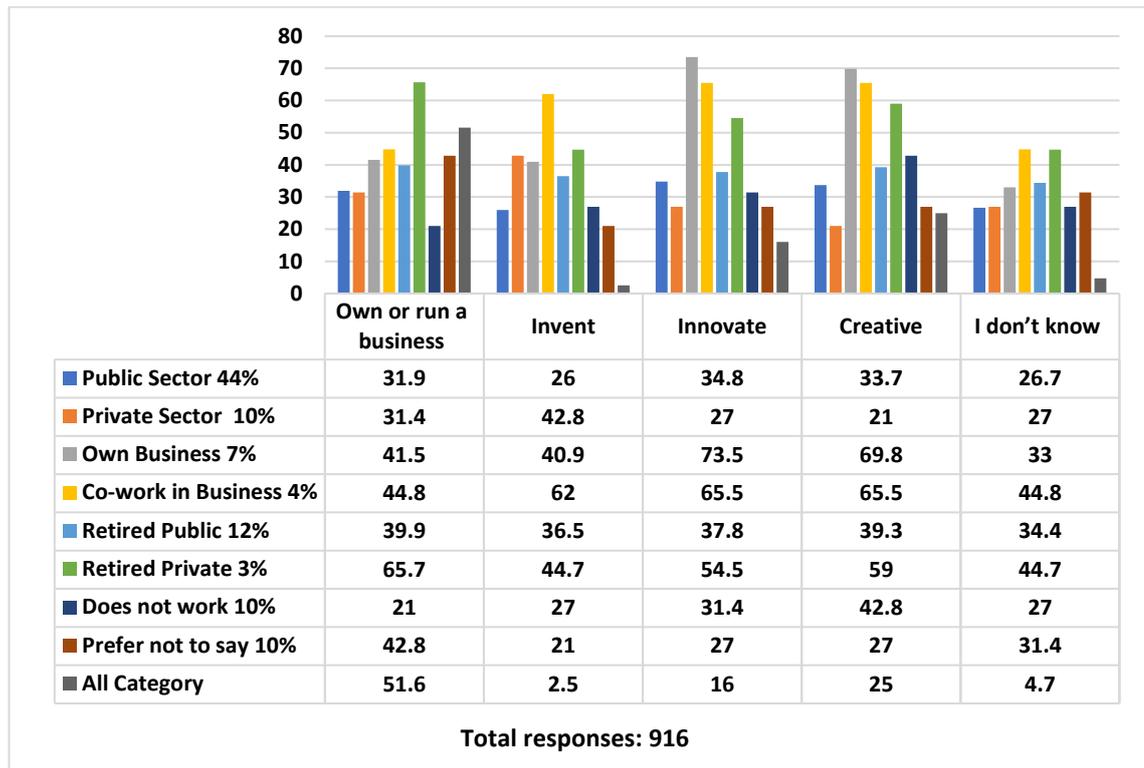
Figure 5.5 HEI Student Understandings of Entrepreneurship by Mother’s Educational Level*



Source: Survey data (*) Multiple responses were possible

For the parents’ professional background, I compare the categories of “owning and running a business” and “co-working in business” with other categories “working in or retired from public or private sector”. That is because parents owning or co-working in a business could be expected to have a closer mentality to be an entrepreneur compared with those who are paid employees in or retired from the public or private sectors. Looking at Figure 5.6 below, more informed understandings of entrepreneurship can be seen in the 7% students (out of 702 students) whose fathers own business. These students interpreted entrepreneurship as “being innovative” (41.7%), “being creative” (39.7%) and “inventing something” (37.8%) (see differences between these conceptions in Chapter 4, Table 4.2) compared to (31%) to “owning or running a business”. Respondents with fathers in public and private sectors and retired from public and private sector (see Figure 5.6) do not show large differences between the categories. For instance, the percentages of those who chose innovation (34.8% in public sector) and creativity (33.7 in public sector) and those who chose “owning or running a business” (31.9 in public sector) are close.

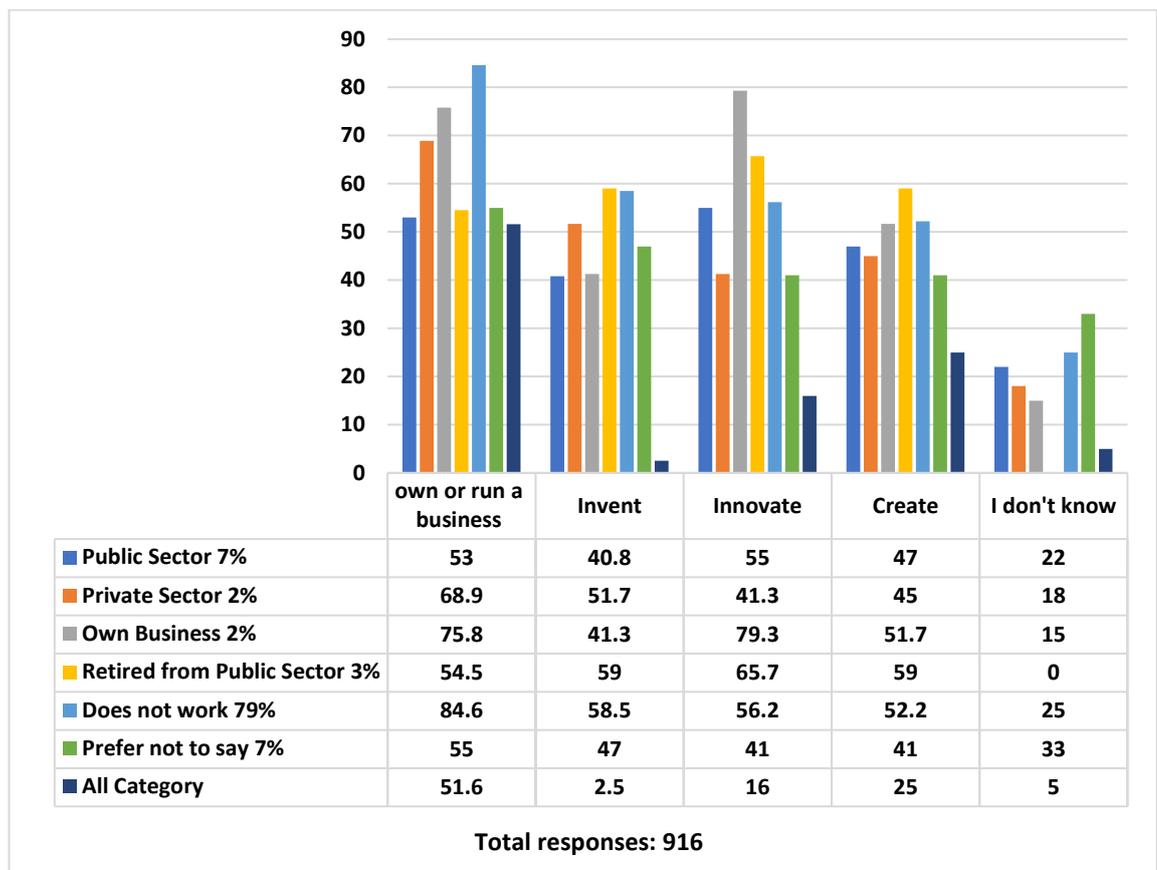
Figure 5.6 HEI Student Understandings of Entrepreneurship by Father's Professional Background*



Source: Survey data (*) Multiple responses were possible

In the case of students' mothers' professional background, Figure 5.7 shows that, for the largest category of respondents (79%) who reported that their mother does not work, the modal category is associated with "own or run business" (84.6%). Associating it with innovation (79.3%) is the modal category of students whose mothers own a business (who are only 2% of respondents) followed by (75.8%) who said, "own or run a business". The rest of the percentages in the other categories do not show significant indicators. This finding is in line with Polin et al. (2016) who found that fathers and mothers being self-employed has a significant impact on their children's entrepreneurial intentions. On the other hand, Sharma (2014) found that parents' occupation does not influence student intentions for start-ups. The different findings in these two studies is attributed to other factors such as education system, and SME infrastructure which are different from one context to another. This study examines these factors in the following chapter.

Figure 5.7 HEI Student Understandings of Entrepreneurship by Mothers' Professional Background*



Source: Survey data (*) Multiple responses were possible

The data, then, suggest family members' (father and mother) educational background has some impact on students' understandings of entrepreneurship. The parent's professional background has a slight effect. That is, students whose parents are more educated and own or run a business seem to have more rounded understandings, e.g., association with innovation, creativity, and invention, and not simply owning a business. Also, gender seems to have a slight significance since more female students link innovation to entrepreneurship. Overall, however, the significance of the above discussion should not be overstated (the survey data was always intended to be used for descriptive and scoping purposes), but I can ascertain from the survey data, with some certainty, that starting a business is most associated by the wider student body (EEP participants and otherwise) with understandings of entrepreneurship. Chapter 6 discusses this in more detail and how it informs engagement with entrepreneurial activity, while the following section discusses entrepreneurship understandings further using the interview data.

5.3.1.2. Interview Findings: Entrepreneurship Definition

Consistent with the survey results (see Figure 5.2), the interviews suggest that the vast majority of students understand entrepreneurship as 'starting', 'opening', or 'running' a

business. This direct association between the meaning of entrepreneurship and the business field, including start-ups, private projects, and SMEs, is common in the literature (Yetisen et al. 2015; Kirzner 2015). However, interviews also reveal prominent social aspects in students' understandings:

Interviewer: How would you define entrepreneurship, please?

Student: An attempt to start a new business that is accepted by society, that is a pre-planned entrepreneurial project. [Khalid, male student from Study Site Two (Engineering), Interview in Arabic]

Although this second-year student responded that entrepreneurship is about starting a business, he added a condition that the business should be acceptable to society and well-planned. As explained in Chapter 3, Oman is a society that has preserved some conservative religious and social values (Jansen et al. 2016), which is often evident in the data. Examples of unacceptable business ventures to most Omani people might be selling alcohol or pork, which are forbidden in the Islamic religion, as this student clarified:

It [business] has to be within Islamic limitations and there should be nothing forbidden in Islam like selling alcohol. Yeah, something like that [Gana, female student from Study Site Two (Business), Interview in Arabic]

The above is another economic understanding of entrepreneurship qualified by a belief system. Here, unlike the policy documents (Section 5.2.1) and survey data (Section 4.9.1), the interview data analysis revealed 'non-materialistic' components alongside the 'materialistic' business orientation of entrepreneurialism. Furthermore, whilst entrepreneurship remains linked with the idea of opening a business, it can also be viewed as a vehicle for social purposes, as this student explained:

Sometimes, when people do their business, it does not have to do with money. It can be for a volunteering organization that will help the society. They... I mean ... look at NGOs, they help people [get] education and make them graduate from colleges and then join the market. [Hala, female student from Study Site One (Business), interview in English]

This student's views of entrepreneurialism went beyond the government-prescribed definitions and includes 'non-materialistic' (or post-materialistic) values, and these are evident across the interview data, particularly from students in Study Site One (see Section 5.2.1). Such values are argued to have appeared in the post-war (World War Two) era as a result of increasing prosperity in advanced industrialised societies (Drucker 2014). Inglehart (2015) defined post-materialism as the transformation from

materialist, physical, and economic values into new individual values such as self-expression, autonomy, freedom of speech, gender equality and environmentalism. The concept of social entrepreneurship appearing in this study's analysis reflects post-materialistic values, which are evident within this cohort of students⁸⁷ but not government policy (see explanation of social entrepreneurship in Chapter 2). Although there are no studies which link quality of an educational institution and post-materialistic values amongst students, there are studies e.g., Warwick (1998); Pavlovic (2015) which argue that the level of educational attainment has some effect on gaining these values (see Chapter 7).

The rentier state's authoritarian character makes it unwilling to allow space for contributions from others, such as NGOs and volunteering societies (Beblawi and Luciani 2015). Hence, the rentier state tends not to encourage social entrepreneurship as it prefers to initiate and control all voluntary and social activities itself. This perhaps explains the absence of social aspects of entrepreneurship in Oman's policy documents – although the diversification of the economy seems to be the principal driving force. The social element is, nonetheless, an essential part of any economy's development (Del Giudice et al. 2014) and hence it is seen by some as part of a broader definition of entrepreneurship, as this lecturer explains:

Interviewer: I noticed when reviewing your course syllabus, there is no mentioning of social aspect [of entrepreneurship]. Why so?

Interviewee: Social needs are part of the economy. They are under one umbrella. I mean to say that developing economy leads to social prosperity. Do you see what I mean? [Humaid, male lecturer from Study Site Two (business), interview in English]

This participant considers the social aspects an implicit part of economic development (Cattelan 2018), whereby encouraging people to start a business and be financially secure leads to beneficial social outcomes like stable families and stable communities. Several studies suggest that there is a dynamic relationship between economic growth, social well-being, and prosperity (Royuela and García 2015).

In addition to the social aspect, the data reveal other non-exclusively materialistic conceptions of entrepreneurialism. For instance, ideas of entrepreneurship related to

⁸⁷ These post-materialistic values vary across the three study sites. They are more obvious in Study Sites One and Two and less so in Study Site Three. This can be attributed to variation of quality ranking of these sites as explained in Chapter 7. Despite that, overall, the majority of this study's students show these values.

self-satisfaction, personal interest, and enjoyment were expressed, as this student explains:

[..] there is a personal interest in doing a business for myself. I always ask myself what I have done and what achievements have I accomplished. I want to do something for myself, something I enjoy. [...] It is good [the business] gives me money but if not, it is OK. I just like to do it. [Hala, female student from Study Site One (Business), interview in English]

Non-materialistic understandings can also be combined with the materialistic, as stated by this student:

From my point of view, entrepreneurship means to have the ability to set up your own business, but it is not only that, it is [also] to satisfy your own needs and to improve your personality for other needs of life. [Nora, female student from Study Site Three (Engineering), interview in Arabic].

These 'needs', as mentioned earlier, can be social, e.g., to contribute to public services (Tan et al. 2005), but also they can be personal, e.g., advancing oneself and becoming a better human being, as this student says:

Interviewer: Why do you want to be an entrepreneur in future?

Student: I think being your own boss, running your own business is self-satisfactory.

Interviewer: What do you mean by saying self-satisfactory, could you explain a bit please?

Student: Being independent teaches you a lot, it improves your personality, becoming an individual who is able to achieve something in this life. That thing is not necessarily money, but something valuable for society [Anwer, male student from Study Site One (business), interview in Arabic].

In any case, there is a sense that these needs are not materialistic. Entrepreneurship is often undertaken to generate wealth, but it can also be pursued in order to develop good citizenship (Bellone and Goerl 1992).

One meaning of entrepreneurship extensively discussed in the literature, but not mentioned by the students is "public entrepreneurship" (see explanation in Chapter 2). The absence of public entrepreneurship is quite surprising as Oman has high levels of public-sector employment and welfare provision (see Chapter 3), and it might be expected that the public aspect would have been more evident in the data. If public sector

workers learn more entrepreneurial skills and become more innovative, the public sector will benefit, e.g. the development of innovative programmes to help facilitate and compensate for welfare provided by the state in the future. However, what the data suggest is that there is an absence of understanding of public entrepreneurship (which might be explained by policy and curriculum documents primarily linking entrepreneurship to starting business in the private sector, as explained Section 5.2) and a lack of awareness of the potential significance of entrepreneurship to the public sector.

A college dean touched upon the issue of public entrepreneurs:

Manager: It is not necessary becoming entrepreneurs but even for those who will work in public organizations, they can still use the entrepreneurial and innovative skills in their work. [Marwan, male manager from additional Site A, interview in English]

Overall, faculty/staff understandings appear to be closer to those of students generally and expressed broader notions of social entrepreneurship than interviewees working in the ministry, who restricted their understanding to the economic purpose (see Section 5.2). This indicates a gap between policymaker (in higher positions in ministries) priorities (and how they choose to understand entrepreneurship) and those managing HEIs (college deans and HEI managers). This claim, however, needs a larger sample of HE managers and policymakers to be confirmed.

The emphasis on policy discourses in Oman excludes more inclusive understandings of entrepreneurship. Similarly, this section has argued that the HE sector has mainly focused on the economic aspects of entrepreneurship and thus private enterprise, though qualified in particular ways. In the following section, the discussion moves on to discuss perspectives on 'entrepreneurial characteristics' in the rentier state context.

5.3.1.3. Interview Findings: Entrepreneurial Characteristics

Relevant to defining entrepreneurship is identifying the characteristics and traits of entrepreneurs. Park et al. (2013) defined traits as measurable or observable components of an individual's behaviour that describe a person's enduring characteristics. This terminology is widely used to describe various skills and characteristics of entrepreneurs (see for example, Sidik 2012; Sastre-Castillo et al. 2015). It is important to note that I only discuss the wider entrepreneur definitions and traits seen by study participants. Some of these entrepreneurial traits/characteristics are also discussed in Chapter 7 as entrepreneurial skills that the EEP aims to develop, indicating its role in promoting awareness of these skills or/and traits.

I ranked entrepreneur characteristics or traits according to how many times they were mentioned by students (see Table 5.1). All these traits have been mentioned previously in the literature (see Chapter 2). I evaluated the rate of significance (high, medium, and low) of each characteristic by conducting a comprehensive analysis of the literature in relation to the interview responses. I used two thresholds to establish this ranking.

- First, significance in study is related to the number of times this characteristic was mentioned by participants as being important.
- Second, significance in the literature is related to the number of sources talking about the importance of this characteristic, as Table 5.1 below shows.

Comparing these rankings with other countries helps identify differences that may exist between how people in Oman understand entrepreneurialism as opposed to elsewhere. This is also important for recommending that these traits be promoted in an EEP.

Table 5.1 Interviewee Top Significant Entrepreneurial Traits and Significance in Literature

Characteristics	Significance in study	Number of Participants ⁸⁸	Significance in literature	Number of Sources ⁸⁹
Innovation or creativity ⁹⁰	High	53	High	53
Risk-taking	High	42	High	48
Independence	High	38	High	46
Responsibility	Medium	23	Medium	27
Hardworking	Medium	21	Medium	26
Passion	Medium	14	Medium	22
Proactivity	Medium	14	Medium	18
Leadership	Low	8	High	45
Flexibility	Low	4	Low	12
Total participants	58			

Source: Interview data and relevant literature sources

⁸⁸ See distribution of number for each characteristic in each group in Table 5.3.

⁸⁹ Of course, there could be more sources which discuss each characteristic. These numbers are only examples of what I could gather within my timetable.

⁹⁰ Despite some studies differentiate between the two concepts (as discussed in Chapter 4, Table 4.2, other studies, e.g., Xie and Paik 2019, undermine this difference. Here, grouping these concepts in one category is mainly due to most interviewees seemed using them interchangeably. It was evident to me that, particularly students, talked about creativity as it means innovation and vice versa. One reason for this confusion is that these concepts in Arabic sound almost the same for most people. Therefore, it would be not accurate data to separate these two concepts in this table and Table 5.3.

Table 5.1 above shows that the characteristics students prioritise align with the literature except for *leadership*, which students rank lower than in the literature (e.g., Vecchio 2003; Leitch et al. 2013). This indicates that Omani students think a little differently from what is commonly understood regarding key traits for entrepreneurship according to the literature but also the EEP. *Leadership* is included in the MOHE EEP guidebook. When it comes to the three study sites, it varies. Whilst there is a whole chapter about leadership in Study Site Three, it is included in Study Site Two's course syllabus as a learning objective for one of the lectures which talks about entrepreneurial skills. Leadership is explored in the form of an activity, a sub goal, a hands-on exercise, or a learning outcome of a theoretical part of Study Sites One curriculum. Despite this variation in leadership inclusion, only three students from Study Site One, one from Study Site Two, and one from Study Site Three (out of 32) addressed this characteristic.

On the whole, however, differences between participant responses and the literature are not as marked, as Table 5.1 illustrates. For example, most students mentioned *innovation* as a key entrepreneurial trait: 'something innovative', 'something new', and 'something unique', and, as explained in Chapter 2, many studies defining entrepreneurship clearly connect it to the concept of innovation (e.g., Chell 2001; Veeraraghavan 2009; Morris et al. 2010; Drucker 2014).

According to some students, an innovative business is unlike a 'traditional business'⁹¹:

Interviewer: You have just mentioned that there is a difference between an entrepreneur and a business owner. Why do you think so, please?

Student: An entrepreneur's business has the components of innovation and novelty that let it compete with other businesses, whereas, a business owner has a traditional business like a coffee shop. There is no new stuff or creativity in this business [Manal, female student from Study Site Two (business) interview in Arabic].

One student associated innovation with new inventions and the use of technology when speaking about how he understood entrepreneurship:

Entrepreneurship is creating a new idea or developing innovative things, like if there is an invention and we are going to develop it. Let's assume that you have some shops. In the beginning the shops only had to buy and sell [pause]. It does not have more options. I mean I can use the internet or social media. Now we can use these innovative ways in the shops [...] the new idea of delivering the orders,

⁹¹ An organization that has very limited innovation and creativity in providing a product or service to customers such as an ordinary store, agency or restaurant (Kalakota and Robinson 2001).

you order something, and it will be delivered to you free of any extra charges, so from the perspective of delivery it has more clients and it has more demand. [Khalid, male student from Study Site Two (Engineering) interview in Arabic]

Another difference between innovative business and 'traditional business' recognised by students is a belief that the former would have a greater impact on economy:

The entrepreneur's idea is, God bless, perfect, and it competes in the market and makes a big bang in the country. The contrary is the restaurant owner, an ordinary person with an ordinary business. [Nima, female student from Study Site Three (Business), interview in Arabic]

The greater economic impact which characterises innovative business was confirmed in some studies (e.g., Wong 2005; Acs 2006).

One more difference between the innovative and 'traditional businesses' mentioned by students was that innovative projects have the ability to expand (whether the business itself is particularly innovative or not):

Yes, it will be small at the beginning, but it will increase gradually. I know someone who had a small car wash station. He moved his business to another location. Now his business is large and very successful. He has received a high income from this business. He did not give up. You will always have the chance to expand your business and open other branches in other cities. This is not limited to this business. You can do a lot of things. [Hamad, male student from Study Site Two (Business) interview in Arabic]

A related trait, risk-taking, comes next in terms of how often it was mentioned by students. However, the data analysis shows that the majority of students do not seem to be risk-takers as they are still very interested in government employment, which provides financial stability and retirement security:

Interviewer: My question is about the nature of the job you plan to find after graduation, for example, in which sector, private or governmental?

Student: In the government.

Interviewer: Why the government, if you do not mind explaining?

Student: Because it's better.

Interviewer: What do you mean by better, please?

Student: Its better in all aspects... salary... retirement [Ameera, female student from Study Site Two (Engineering), interview in Arabic]

The literature closely attaches *risk-taking* to the entrepreneur and states that it is a key value for any entrepreneurial work (Knight 2006; Burns 2008). One student explained the amount of risk that any entrepreneurial endeavour involves:

I think the main difference is in risk-taking. Those people [entrepreneurs] want to come up with something new [...] in the market and they are not afraid of failure. Failure is part of getting the thing you want done. For instance, they come up with new ideas, are creative, going out to the market and explore whether it will work or not. The failure rate in this case is high. [Aseel, female student from Study Site One (Business), interview in Arabic]

Being well-acquainted with the 'risks' (including the possibility of success and failure) caused some students to positively evaluate their future tendency for entrepreneurship:

The other thing is, it is good to be adventurous and a risk-taker but he [entrepreneur] should be able to evaluate risk and assess it properly before doing anything. However, the risk factor is important in entrepreneurship as it opens opportunities. [Salim, male student from Study Site One (Engineering), interview in Arabic]

However, for other students, the possibility of failure impacted them negatively and those students reported having given up on the idea of entrepreneurship because of the risk involved:

Also, there is a risk of opening a business. Most people prefer a secure job and getting a salary at the end of the month. There is always a fear of failure. Many businesses fail. I am afraid that I might fail as well, that is why I am thinking of getting a job. [Issa, male student from Study Site Three (Business) interview in Arabic]

Another trait linked to risk-taking is *proactivity*. This is a basic entrepreneurial trait suggested by Wickham (2006) and Burns (2008) and stated by some interviewed students:

Entrepreneurs are proactive, they do not wait for the opportunity, but they search for it. They are risk-takers, creative people, because they come up with something new which markets need. [Maysa, female student from Study Site One (Business), interview in English]

This could indicate that risk-taking might involve taking the initiative to seize opportunities and similarly a proactive person can also be a risk-taker. These two traits seem to go together.

The third most frequently mentioned feature when talking about defining traits of an entrepreneur is being *independent*.

Interviewer: So how would you define an entrepreneur?

Student: An independent person who does not like to have a boss to give him orders and instructions. This is the important thing about an entrepreneur, to be independent. [Laila, female student from Study Site One (Engineering), interview in Arabic]

Most students, like this one, expressed a desire for independence and freedom in work. There is a strong inter-connection between these three characteristics: *innovation (or creativity), risk taking, and independence*. That is, students tended to associate these traits with each other when defining the entrepreneur, indicating that entrepreneurial traits overlap. Around 10 students linked risk-taking with innovation, 8 mentioned the connection between risk taking and independence, and 6 associated creativity with risk-taking. There is extensive literature linking risk-taking with innovation and/or creativity and independence with entrepreneurship (e.g., March and Shapira 1987; Tan 2001; Zahra 2005), which is reflected in the perspectives of those interviewed as part of this research.

Another common meaning appearing often, although less frequently, in the data is being *hard-working*. This is a characteristic that cannot be separated from some or all the previously mentioned traits of the entrepreneur. A few students attached this particular feature to the entrepreneur in the same way as in previous studies (e.g., Lee and Lee 2015; Yao et al. 2016) did:

Look, most people have impression that the person who is running a business must be talented in their studies. This is not true. It is a matter of having patience, struggling, and not giving up easily. What matters is the hard work. [Fahad, male student from Study Site Two (Business), interview in Arabic]

The above quotation indicates that an academic degree is not as important as hard work for entrepreneurship in the eyes of the respondent. (Chapter 7 elaborates more on the role of education and acquiring a degree.)

Overall, student understandings broadly fit with wider understandings of entrepreneurship, but there are some differences that can be related to the rentier state context. For example, the occurrence of some entrepreneurial traits is seemingly weak in the Omani context, most notably with regards to risk-taking and leadership. This forms

a basis to analyse how the rentier state context influences people's understandings and engagement with entrepreneurship, which is the purpose of Chapter 6.

5.3.2. HE Managers and Lecturers

This section analyses the perception of this group of 15 interviewees, a small number that makes it difficult to compare responses between the three study sites. The main point is that lecturers prioritised the entrepreneur's key traits in a slightly different order than students and included new traits that were not highlighted by them.

Whilst innovation, risk-taking, and independence were at the top of the lecturers' lists, aligning with the student results, passion, responsibility, and leadership came next. These three traits were among the least important for students. Planning was also perceived by lecturers as an important entrepreneurial characteristic, whereas almost none of the students addressed this feature:

Planning is important feature of entrepreneurship that students must acquire. They need to be good planners to be good entrepreneurs. [Khalifa, male lecturer from Study Site Three (business), interview in English]

One HE manager stated that passion is more important than education (quite interestingly, this aligns with most entrepreneur perceptions, as explained in the following section):

Of course, many skills are involved. Firstly, communication skills or self-confidence and the love of adventure, curiosity, and challenge to fail and learn from failure easily and most importantly the passion rather than education. My cousin never had proper education, barely made it through high school, yet amazingly, Glory to Allah, he strived and opened a bricks manufacturing workshop in the industrial zone. He now lives a much better life and the secret to his success is that he did not hire people to run his business for him, instead he chose to manage his own work. He has the passion to push and prove himself regardless of what people say. You see people may think of doctors or teachers as better people than entrepreneurs, but his notion started to change. I myself have always encouraged entrepreneurship [Female manager from Study Site Three, interview in English].

Overall, it seems that HE managers and lecturers and students concur regarding the main understandings of entrepreneurial traits, i.e., innovation/creativity, risk-taking and independence, but there is slight difference in ordering the secondary ones, i.e., responsibility, passion, and being hardworking (see Table 5.3), which is perhaps a reflection of age and experience, but no explanations were offered.

5.3.3. Entrepreneurs

Identifying differences between this study's interviewees is useful in order to compare understandings based on an academic programme (HE faculty/staff and students) and those who did not take academic programmes but were experiencing entrepreneurship in its actual context (entrepreneurs). In this case, the data indicate that different contexts (academic and labour market) create similarities, but also differences. Entrepreneur perspectives might provide the most authentic insight regarding entrepreneurship meanings as they come from those with first-hand experience. Most entrepreneurs' understandings are in line with both students' and lecturers' in prioritising economic meanings at the expense of social aspects. Eight entrepreneurs identified economic goals and only two mentioned social benefits to the economy. In addition, similar to students, entrepreneurs identified meanings such as starting and running a business, *innovation*, and *risk-taking*. However, entrepreneurs slightly differ from students in ranking top entrepreneurial traits, as shown in Table 5.3.

Second, consistent with lecturers, *passion* and *leadership* are also key traits for the entrepreneurs interviewed. Entrepreneurs recognised how important it is not to lose passion in entrepreneurial ventures where failure can occur numerous times. It is a trial and error process that requires a lot of determination, hard work, and patience. Likewise, leadership may have to do with maturity and experience.

On the other hand, *independence*, *open-mindedness*, and *responsibility* are traits entrepreneurs and students both consider important, as this entrepreneur explained:

I keep telling the youngsters, in order to be a successful entrepreneur, you need to be independent and responsible and to be standing on your own feet. It has to start from you. Nobody told us to do these things in my old days. [Male successful entrepreneur, (oil and service). Interview in English]

Unlike students, who highlighted the importance of *initiative*, entrepreneurs showed no acknowledgement of this aspect, which might be because entrepreneurs have already demonstrated initiative, while students need to be able to take the initiative to become entrepreneurs.

Furthermore, the data show that planning was recognised as important by successful entrepreneurs compared to the five failed entrepreneurs, none of whom mentioned this aspect. The quote below is illustrative:

Interviewer: How would you define an entrepreneur?

Entrepreneur: Simply, an entrepreneur is an opportunist who can plan well. Without planning, the business will fail for sure [Successful female entrepreneur (education), interview in Arabic]

Planning seems to be important to success, according to this interviewee, and it was also the case with the other four successful entrepreneurs. The latter also suggested that higher education strengthens business planning ability, which resonates with lecturers' views.

There are, however, mixed views on youth versus experience, which is an important consideration given the aims of policy makers to expand entrepreneurial skills amongst the student and young graduate population. On the one hand, being younger is important for entrepreneurship success as it is linked to stamina, according to some entrepreneurs:

Now we see new companies run by young entrepreneurs who are energetic and well-educated, and they have succeeded and expanded their business. [Male successful entrepreneur, interview in Arabic]

On the other hand, other entrepreneurs believe that being younger equates with having less experience and knowledge, as is the case with this entrepreneur, who also trains entrepreneurs:

Interviewer: Part of your work is that you deal with entrepreneurs and you give them training and consultation services. Can you tell me about the perceptions of those entrepreneurs? How do they perceive starting and running SMEs?

Entrepreneur: My impression [...] that the age range here from 20 to 35. The age range in Oman is younger than the world average. This makes the knowledge of these entrepreneurs, even though most of them are graduates, not enough. [Successful male entrepreneur, (oil and service) interview in Arabic]

Another entrepreneur explains the importance of work experience for starting a successful business:

I see many young entrepreneurs who are in big trouble and some of them went to jail [as result of not paying off their debts]. It is not a matter of starting a business, it is how to run it and make it survive. You cannot make graduates become entrepreneurs immediately. No way this can work. When we started jobs in our companies, we had no experience. [Successful male entrepreneur (Education, consultation and training services), interview in Arabic]

Indeed, the wider body of evidence finds that ‘individuals of moderate experience are most likely to transition to successful entrepreneurial activities (Rider et al. 2013, p 29), a view that supports those students who assume maturity is important for entrepreneurship. Such students are less likely to start a business right after graduation and thus frustrate the aims of policy makers. Azoulay (2018) argued that lack of experience increases risk and the possibility of failure in entrepreneurship and found, moreover, that being middle-aged is a key to entrepreneurial success. Thus, while one of the motivations for introducing entrepreneurship is to benefit from Oman’s relatively young age profile, the data and findings mentioned above represent a serious challenge to this goal.

Most research in this area has not investigated how entrepreneurs understand entrepreneurialism, but rather how they perceive success in entrepreneurship. Fisher et al. (2014, p. 478) found that entrepreneurs believe that both “personal and macro level variables” are important in order to be successful. “Macro variables” can be financial and economic factors and, most importantly, personal variables such as self-motivation, which is driven by satisfaction and passion for achievement. These personal variables can be regarded as the traits of a successful entrepreneur (self-motivation and passion for entrepreneurial activities) as identified by entrepreneurs themselves.

5.3.4. Policymakers

The two interviewed policymakers⁹² understandings focussed exclusively on economic issues and employment, which are the exact focus of policy documents (see Section 5.3). The following definition from this MOHE policymaker is illustrative:

Entrepreneurship is to help students to start up their own businesses which are relevant to their educational disciplines as much as possible. We here try to increase the chance for students’ success by providing him with appropriate educational environment in the way it helps him to sustain his/her business or enterprise. Entrepreneurship in higher education institutes should be related to the disciplines/majors that students enrol in. [Male policymaker from MOHE, interview in English]

This understanding is unsurprisingly in line with Oman’s policy documents, which focus on entrepreneurship development for economic diversification (see Chapter 3). According to Beblawi and Luciani (2015, p. 116), policymakers in rentier states prefer to

⁹² One is from the Supreme Council of Planning, and the other is from the HE sector.

develop SMEs as they are ‘politically safer than powerful companies and economically complementary to large public sector undertakings’.

Oman’s policy, however, gives each HE site the freedom to create its own entrepreneurship curriculum and thereby the possibility for other non-economic meanings to emerge (see Section 5.2 and Section 5.3.1.2). Despite this freedom regarding curriculum development, the central policy document (MOHE guidebook) limits programme aims to economic ones and instructs all HEIs to follow this guidebook. This signals a slight misalignment between policymakers’ views/priorities and what students want in addition to economic meanings (e.g., social and personal aspects). This narrowness of interpretation appears again with the second policymaker from the high planning authority:

Entrepreneurship is relevant to starting a small business or company. To me even the fishermen who work in the sea are entrepreneurs. Those people can expand their businesses and start-up companies and they can change our economy. [Male policymaker from SCP, interview in Arabic]

Consistent with the document review (Section 5.2), policymaker interviewees indicated that entrepreneurship is being promoted for the purpose of solving the problem of unemployment through the creation of more local businesses:

I can say that part of creating jobs for Omanis involves increasing the number of SMEs and entrepreneurs [...] Whenever we mention the private sector, then we mean SMEs as part of it [...] More SMEs will mean more local products and services in the market and more value being added to the economy [...] Don’t forget that these SMEs will reduce the large amount of money that goes out of the country, which is transferred by foreign labour every year. SMEs will create a circuit and keep our currency inside the country. [Male policymaker from SCP, interview in Arabic]

This economic aim of creating jobs through entrepreneurship is one that policymakers are working to convey to people, and this message has been received by most of the relevant stakeholders, as previous sections explain. However, what differentiates policymakers from others is that the former only noted the positive side of these policies. For instance, the following policymaker declared:

Funding now is available, and it is generous I do not understand why so many entrepreneurs in Oman see loads of obstacles. I believe the government has done a lot of work to encourage them. I still think that SMEs have failed to play the role

that the government is looking for. Entrepreneurs should take more risks and start some initiatives [Male policymaker from SCP, interview in Arabic]

This policymaker interpreted people's reluctance to launch SMEs as a lack of risk-taking behaviour rather than difficulties with rules and regulations or access to the funds that the government offers. However, this clashes with most of the student and entrepreneur views, as they reported that there are complications in those rules and insufficient funding (see the following chapter 6). Policymakers showed little acknowledgement of these difficulties.

5.4. Study Definitions of Entrepreneurship and Key Characteristics

This section summarises the findings of the chapter and their significance for the study. The first point of note is that there is a clear gap between how policymakers (and policy documents) and entrepreneurs, on the one hand, and stakeholders in the HE sector, on the other, understand entrepreneurship. Table 5.2 compares the different aspects of their interpretations of entrepreneurialism.

Table 5.2 Comparison of Stakeholder Entrepreneurship Understandings

Stakeholder	Entrepreneurship's Purpose	Rationale	Obstacles to Entrepreneurship Understanding
Policymakers	Economic	Diversifying the economy	Ignores the importance of social aspects for economy
Entrepreneurs	Economic	Sustaining business and avoiding failure	Business sustainability (their main income) in hostile environment
HE managers and lecturers	Economic and (to a more limited extent,) social	Meeting policy and student needs	Balance between following policy aims (economic diversification) and including broader meanings based on their institution's needs, e.g., some social science departments require including social aspects
HE students	Economic, social, and individual	Personal income and fulfilment	Prioritising personal benefit (securing a paid job) over national interest (more SMEs)
Total Participants			58

Source: Interview data

Students (and to some extent HE faculty/staff) expressed a wider understanding of entrepreneurship than policymakers, also including social and personal meanings.

The second key finding is illustrated by Table 5.3, which attempts to show the way study participants⁹³ rank the key characteristics or traits of entrepreneurship (as discussed in Sections 5.3.1 to 5.3.4).

Table 5.3 Top Entrepreneurial Characteristics According to Study Participants

Entrepreneurs⁹⁴		Students		Managers and Lecturers	
Innovation or creativity	8	Innovation or creativity	31	Innovation or creativity	14
Risk-taking	6	Risk-taking	24	Risk-taking	12
Passion	5	Independence	23	Independence	12
Leadership	3	Responsibility	14	Passion	10
Independence	3	Being hardworking	14	Responsibility	7
Responsibility	2	Passion	5	Being hardworking	7
Proactivity	3	Proactivity	4	Proactivity	7
Experience	2	Leadership	4	Leadership	2
Total participants	56				

Source: Interview data

What I attempt to show in Table 5.3 is the linearity with which the study participants understand entrepreneurship. That is to say, across all participants there is a core understanding based on a broad consensus that innovation, creativity, and risk-taking (proactivity) are the main defining characteristics of entrepreneurship. The important point is that definitions of entrepreneurship in Oman also differ little from elsewhere, as discussed in the literature. The main difference, as will be discussed in subsequent chapters, is in how entrepreneurship is facilitated and engaged with.

5.5. Conclusion

This chapter has addressed study objective 1 on how entrepreneurship is understood by study participants and more specifically the EEP stakeholders. It has discussed how entrepreneurship is seen differently in a number of respects but also how there is a consensus on many aspects that are central to entrepreneurship (innovation, risk-taking, etc.) among the interviewees. The exception to this is policymakers, whose understanding is more focused on economic development.

There is, moreover, significant consensus with the entrepreneurship literature, although there are some departures which reflect the Omani/rentier state context. First, Oman's context has influenced the EEP policy and curriculum documents and policymaker perceptions, limiting entrepreneurship to economic meanings only. This results in a slight

⁹³ The sample of only two policymakers does not allow them to be included in this comparison.

⁹⁴ None of the entrepreneurs mentioned being hardworking.

gap in understanding with students, who recognised non-materialistic meanings such as the social and personal to a greater extent. Nonetheless, the majority of the study participants emphasised the economic meaning of entrepreneurship, which is the State's main goal as expressed in the EEP policy and curriculum documents. Hence, Oman is working within conventional understandings but interpreting them within its specific context. The chapter, therefore, raises the importance of exploring these contextual factors which shape entrepreneurialism and its development in a rentier state in more depth, which is done in the following chapter.

6. Chapter Six: Engagement with Entrepreneurialism in a Rentier State Context

6.1. Introduction

The previous chapter explored the meanings of entrepreneurialism and its characteristics in Oman. This second analysis chapter takes the findings of the previous chapter as a basis for addressing the second research objective and its sub-question 3 (see Chapter 1), moving on from exploring understandings of entrepreneurship to research how stakeholders engage with the concepts of entrepreneurship. In this study, engagement is manifested in participants' attitudes and intentions to undertake entrepreneurial activities. The data show that contextual factors, which this study also calls "contextual specificities", shape this engagement. The discussion sets the scene for exploring the EEP's potential to shape meanings and engagement in the following chapter.

This chapter starts by exploring Oman's institutions and political economy as the first contextual specificity. This is divided into political factors, which refer to the rentier state political structure, or how the role of the State, the type of government, policies, and rules and regulations affect entrepreneurship (Section 6.2). The economic factors discussed in Section 6.3 refer to the implications of implementing the EEP for developing entrepreneurial skills as human capital (see Chapter 2) in order to create employment and support Omanisation processes (see Chapter 3). Section 6.4 focuses on cultural and social factors such as family and friends, social media, and religion.

6.2. Political and Policy Factors

Political aspects appear persistently in the data as relevant contextual factors. Oman, a rentier state, has a top down political structure (Beblawi, 1987) that has led to less openness, restricted freedom of speech, an absence of political parties, and a sizeable bureaucracy (Valeri 2013). Given that Oman aims to transition away from being a rentier state by diversifying its economy, it realises that it needs to change, as the interview extract below suggests:

The state (government) used to control everything and the private sector always complained about not being given the chance to play a role. Now we will give many chances to the private sector, as the government will take its hand out of many sectors. [Male policymaker from SCP, interview in Arabic]

The government is indicating that it will step back from restricting the private sector from developing and expanding, including through entrepreneurship, suggesting some

moderation of this top down policy-making approach. Indeed, policymaking structures play a key role in disseminating thoughts, promoting culture, creating understandings, and even directing people's attitudes in any society (Taylor et al. 2003), and especially in a rentier state context (Beblawi and Luciani 2015). Some of the students expressed an awareness of the government's approach to change through implementing an entrepreneurship policy. There appeared to be a consensus regarding the rationale for this policy, as explained by one of the student interviewees:

Interviewer: *Why do you think the Omani government has been so interested in entrepreneurship lately?*

Student: *It's because they don't have a range of income sources; they depend on one source of income, which is the oil and gas sector. Therefore, nowadays, the government realises that entrepreneurship can make a major contribution to the redevelopment of this country. Medium-sized companies will someday grow and become big; after all, they operate within and for Oman, so whenever the country has a deficiency, they help provide what it lacks. This helps the economy's growth and development. [Aysha, female student from Study Site One (engineering), interview in Arabic]*

There is not only acceptance. Some students sounded sympathetic to the country's current situation and therefore accept what the labour market has to offer: i.e. entrepreneurship as an alternative to public sector jobs, which are now less plentiful. This attitude is illustrated below:

We know the government gets its income from oil revenue. We, the people, should contribute by adding to this income through SMEs, which will bring currency into the country. Moreover, we will consequently be able to earn our own personal income without the government having to commit to offering us jobs and salaries. This will decrease the financial pressure on the government. [Laila, female student from Study Site One (Engineering), interview in Arabic]

This student's appreciation of government efforts for economic diversification reflects a belief system created by the power of Sultan, the role of the state, and the lack of opposition, which are rentier state features (Beblawi and Luciani 2015). This political belief system is enhanced by an economic rationale, i.e., people have the desire to sustain the welfare system they are enjoying and thereby trust their government's efforts (see the following section). This sympathy with the governments' arguments and policies may not be so evident in democratic regimes, where there is greater freedom of speech and public engagement (Khiabany and Williamson, 2015). However, despite the large

majority of the interviewed students appearing to be sympathetic (around three quarters), they still expressed a desire for salaried employment, mainly in the public sector, with just a few preferring the private sector. This was not surprising, as it highlighted the difference between people merely expressing sympathy and their need to make crucial life decisions, such as establishing a career pathway.

Another political feature which appeared in the data is lack of freedom of speech. This student talked about obstacles to entrepreneurialism, but what bothered him most is not having the opportunity to discuss them:

There are many obstacles, and nobody seems to care. No one can speak out. We need more space to discuss the reasons businesses fail. I do not know why people do not care. [Female failed entrepreneur (food services), interview in Arabic]

Oman is similar to most rentier states and does not enjoy high political freedom (Valeri 2013). Holcombe (1998) found that developing countries with lower political freedom are more favourable to entrepreneurship than developed countries. Tan et al. (2003, p.6) argued that low political freedom leads to high interest in starting businesses because this low freedom is correlated with less economic development and thereby entrepreneurship becomes “an avenue for survival and subsistence”. However, Tan et al. (2003, p. 6) pointed out that there is an “interrelationship” between political factors and other environmental and economic factors, although these were not explored in their study.

Another political feature is the gap between policymakers’ perceptions and the views and experiences of students and entrepreneurs. One policymaker inferred that reluctance on the part of entrepreneurs to engage in entrepreneurial activities was due to their lack of risk-taking spirit:

Those people [entrepreneurs] can expand their businesses and start-up companies and they can change our economy. The fund now is available and it is generous. I do not understand why many entrepreneurs in Oman see many obstacles. I believe the government did a lot of work to encourage them. I still think SMEs have not played the role that the government is looking for. Entrepreneurs should take more risks and start some initiatives. [Male policymaker from SCP, interview in Arabic]

This demonstrates the policymakers’ lack of awareness of, or disregard for, the obstacles entrepreneurs face and it could justify the policy-makers’ inclusion of ‘risk-taking’ as an attribute for development through the EE programme (see Oman Ministry of Higher Education 2015, p. 8 and 34).

However, students and entrepreneurs participating in the present study cited complex rules and regulations and lack of funding (possibly as a barrier to risk-taking):

Student: Many rules and regulations discourage me and my friends from starting a business. There are many obstacles such as difficulty and slowness of registration and clearing all these administration procedures.

Interviewer: Why do the majority of youth hesitate about entrepreneurship? What other factors can you think of beside rules and regulations?

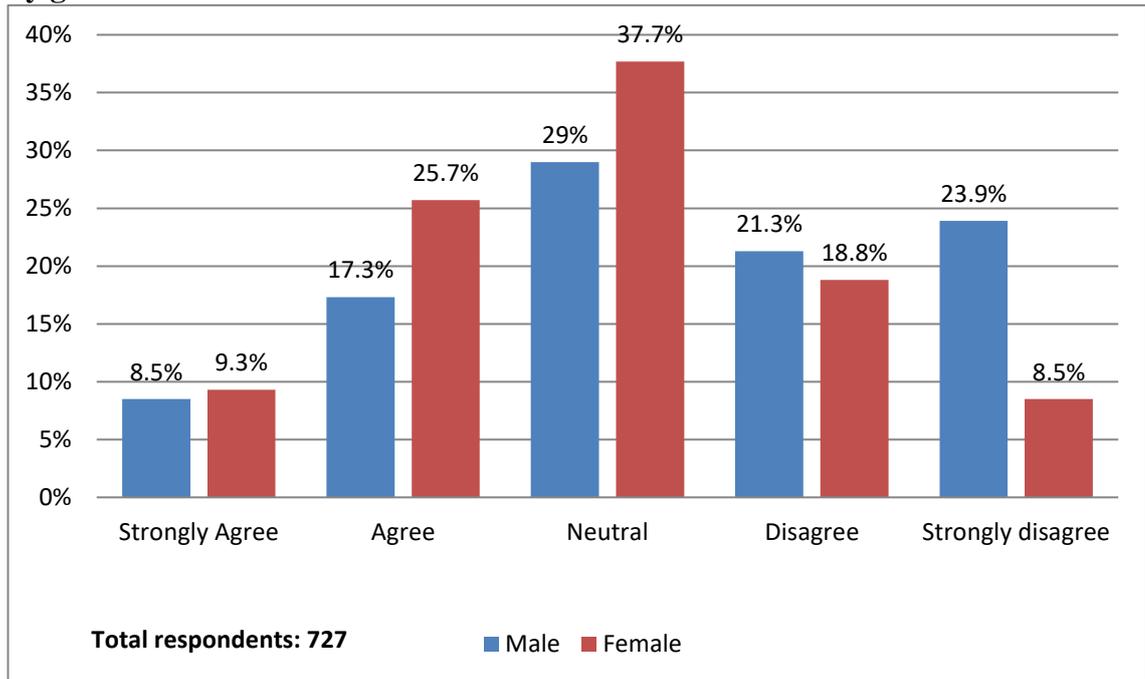
Student: The money, the required financial capital to start the business is not available [Wisam, male student from Study Site Two (engineering), interview in Arabic]

Even if the funds are available, there is a lack of a safety net in case of loss which makes most students hesitant to select entrepreneurship-related pathways. This was explained by one student, as follows:

The second thing I took into consideration were banks or financial bodies which offer loans. One must, after a certain period, pay back the debts. So, if I lose my financial capital, there is a possibility of being legally charged and getting into big trouble. This makes me think that these rules do not support the student entrepreneur. [Saoud, male student from Study Site Three (Business), interview in Arabic]

The above student had a very negative reaction to the rules and regulations in Oman and the problems he may have if he loses his business. In addition, seventeen interviewed students expressed such views. The survey results (in Figure 6.1 below), indicate males mainly hold neutral to negative views, whereas females are a bit more positive. The majority of students, particularly single women who, as according to one female, rarely run businesses in Oman, will not have gone through the process of starting a business, and are probably not well informed about applicable rules and regulations. However, 9 out of 10 of interviewed entrepreneurs, who regularly deal with these rules and regulations as part of their daily routine, confirmed them to be discouraging.

Figure 6.1 Do business regulations in Oman encourage start-ups? Student responses by gender



Source: Survey data

When reviewing government efforts, it is clear that a lot has been done to encourage start-ups. However, the implementation of these initiatives has not been effective. For example, the Invest Easy Portal (One Stop Shop) initiative is a virtual platform launched in 2013 where the entrepreneur can register a business, apply with ease for Chamber of Commerce certificates, apply for licenses for business activities, and receive updates on regulations and fees (Oman Ministry of Commerce and Industry, 2018). This platform facilitates these simple initial steps, but there remain many other procedures to actually start up the business such as clearance from the Ministry of Environment, the Municipality, and the Ministry of Manpower which require physical presence and interaction with staff of these government entities. One problem with this is explained by this entrepreneur who is a student as well:

Interviewer: You have mentioned something important, that the mood of the staff is one reason for the delay in processing the applications. Was that related to weak administration and supervision from top management or is it because of the low qualifications of the staff in charge?

Entrepreneur: It can be both. It is a matter of luck if the staff member is at his desk and in a good mood, and will clear off your application. This is only one station, and then you need to get your application to another place. All these complications and delays are frustrating. This is a really serious issue. Many of the staff are irresponsible and careless. Some of them can finish the application right away but

they choose to leave it to tomorrow [Nasser, male entrepreneur whose business was shut down and student from Study Site Three (Business), interview in Arabic]

This entrepreneur who was running a business had a bad experience due to government staff irresponsibility and carelessness (as he said), which can be a huge drawback for students considering entrepreneurship. The great majority (9 out of 10) of interviewed entrepreneurs expressed similar complaints that staff in the public sector lack responsibility and care and hence discourage future entrepreneurs. A few interviewees mentioned other reasons, such as lack of experience (or training), lack of skills for dealing with entrepreneurs or slow procedures. However, staff are difficult to dismiss in Oman⁹⁵, which is characteristic of rentier states with large levels of public sector employment.

Most interviewed participants (particularly entrepreneurs and to a lesser extent students) hold similarly negative attitudes. Almost all the entrepreneurs, about seventeen students and six faculty/staff addressed a number of hindrances, such as unavailability of funds or lack of awareness of their availability (i.e. poor information); funds being available but complicated to access, unfair or unclear criteria for selecting applicants to receive funds; and funds being available but with high risk. The last problem was the reason cited most frequently by students:

Interviewer: *Why then do you not want to make use of these available funds?*

Student: *Maybe the fear of losing the loan money, God forbid. If your business fails, it's better to lose your own money, not the bank loan, which makes it high risk and I do not want that.* [Maher, male student from Study Site One (Engineering), interview in Arabic]

Although refusal to take out risky loans conflicts with one of the entrepreneur's typical traits - being a risk-taker - inability to pay back a bank loan could lead to a prison term. Therefore, this student prefers to lose his own money because the consequences are not as serious.

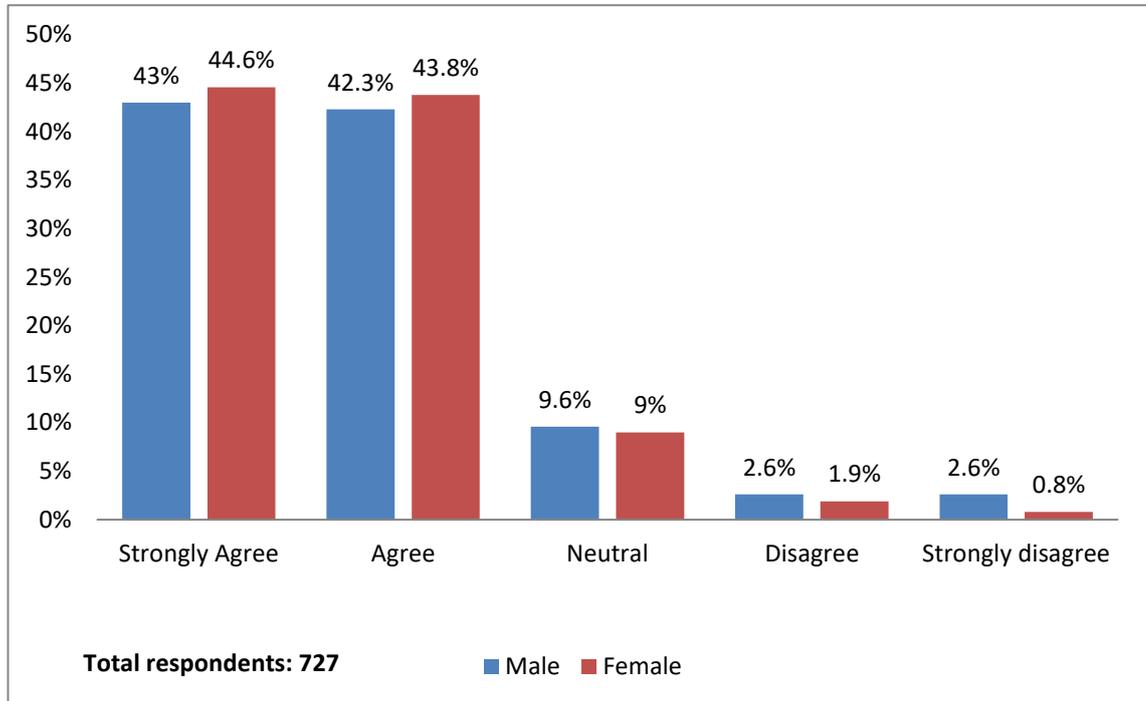
6.3. Economic Factors

Oman's rentier state structure, its economic plans and visions, and desire to diversify the economy and Omanise labour, as already explained in Chapter 3, have implications for entrepreneurship development. The policy's desire of cultivating entrepreneurship growth, particularly SME start-ups, is reflected in most of the interviewees and student

⁹⁵ Only the head of a unit (e.g., the Minister) can fire a government employee and only in a very extreme cases such as committing or crime.

survey data (see below Figure 6.2). When applying gender variable, the differences are too marginal to indicate anything of substance in the below figure and the following Figures 6.3 and 6.4.

Figure 6.2 Are SMEs important to Oman’s economy? Student responses by gender



Source: Survey data

Most students - both male and female - strongly agreed or agreed with the statement that SMEs are important for Oman economy. Despite the fact that these students’ perceptions align with Oman’s desire to increase SMEs, the survey was unable to uncover why they responded this way. As explained in Chapter 4, the interviews undertaken for this study take the survey results further, in this case helping to explore why participants think SMEs as part of entrepreneurship development are important for Omanisation and diversifying Oman’s economy, as the following sections discuss.

6.3.1. Environment for Entrepreneurial Engagement

There is a clear intention in Oman’s policy to create an entrepreneurial environment, as this policymaker from the HE sector affirmed:

The decision of transferring colleges of education into colleges of applied sciences in 2005 was not basically to match the needs of qualifications to what government jobs require but for self-employment and private companies. Graduates of majors such as design and communication in many countries, can start up their own businesses and run them from home. Therefore, from the first day we decided to offer these majors, we thought of offering an EEP alongside, to acquire students

with knowledge and skills and “positive attitudes for private enterprises” that enable students to start-up small and medium enterprises. We believe that this programme will gain them experiences for private jobs especially that it was envisioned there will not be enough government jobs in future. Of course, another reason for applying this programme is a response to the recommendations of Seih Al-Shamikhath symposium which directed us (Oman Ministry of Higher Education) and ministry of education to offer an EEP. In addition to this, there was a confession at the ministry of the future of employment will be self-employment – instead of graduating students with academic knowledge only it will be graduating students with entrepreneurial knowledge, skills and values. We believe it is an international trend, not only in Oman. There are even now entrepreneurial universities like in Finland and Malaysia, so the student starts thinking of his/her own enterprise from the first day he/she starts school. Then the student develops it throughout his/her undergraduate study. Thus, it is both: a response to symposium’s recommendation and a belief at the Ministry of the importance of the programme. We at colleges of applied science are under the supervision of Oman Ministry of Higher Education, so we offer it as compulsory. [Male policymaker from MOHE, interview in English]

As in other countries (see Chapter 2), Oman has placed greater emphasis on human capital in order to facilitate its economic development. This can be seen from the recent rapid expansion of its HE sector, with expenditures on education accounting for 10.8% of all government spending in 2013, representing a 25% increase compared to 2012 (Muscat Daily, 2013). In 2016, the Omani government spent 18% of its total budget on education (Oman Ministry of Finance, 2016).

However, education is only one pillar in an environment conducive to entrepreneurship (see Chapter 2). Furthermore, in his examination of the potential for High Skill Ecosystems (HSEs) in the UK, a developed economy, Finegold (1999, p. 75), also emphasised that “a supply of high-quality graduates, and the presence of world-class research institutes in a free-market political economy can provide an enhancing environment for enterprise growth”. Finegold held up Silicon Valley as a prime example of an HSE, and others have pointed to the high number of SMEs in the USA, where over 99% of firms are classed as SMEs, creating two-thirds of all new jobs (see Shi and Li, 2006). Oman, however, currently lacks the appropriate environment and characteristics for such development, but nonetheless has sought to expand the supply of graduates.

Any country’s economic environment will impact the occurrence of entrepreneurship (Gartner, 1985, Burns, 2008). Audretsch and Thurik (2004) suggested that research and

development (R&D) aids the private sector by leading to greater diversity of activities, knowledge spill-overs, competitiveness, and motivation which can provide the ideal economic environment for more engagement with entrepreneurial activities. R&D and market conditions are included as entrepreneurship indicators in the OECD/EUROSTAT framework presented in Chapter 2. The following section explores some of these factors.

6.3.2. The Private Sector and Omanisation

The EEP was made compulsory in an attempt to drive more graduates towards entrepreneurship activities and make Oman's private sector dynamic and contribute to diversifying its economy. This intention was explained by one of the policymakers interviewed:

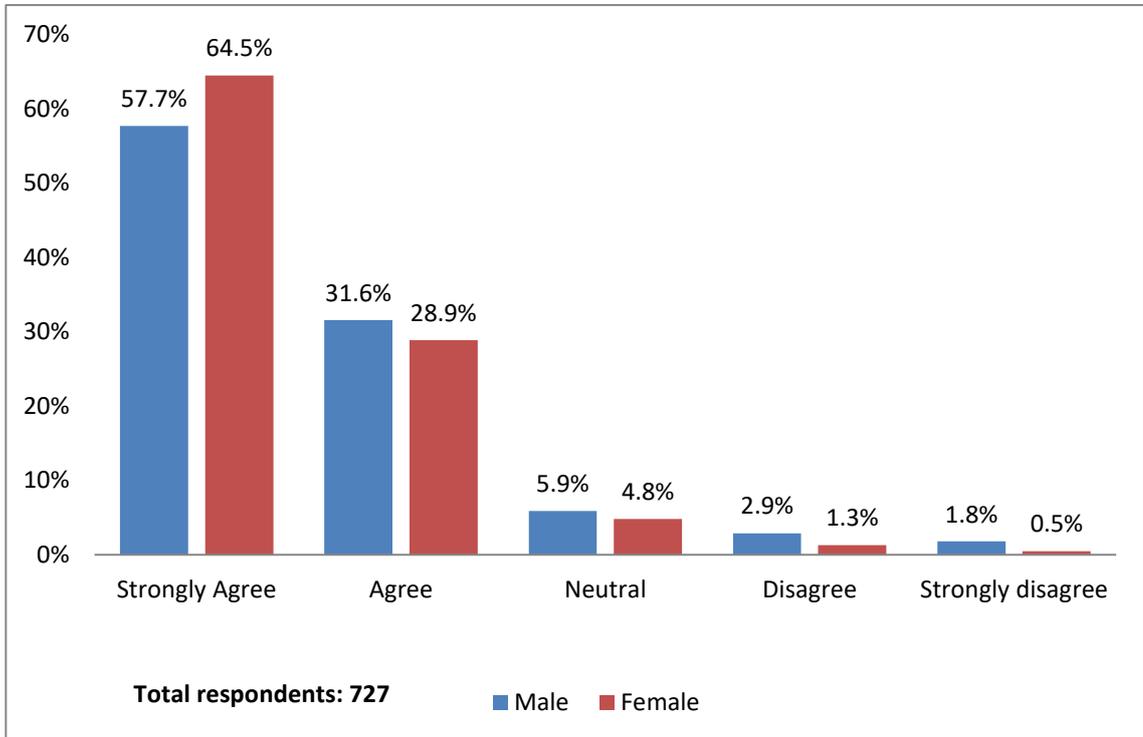
Interviewer: I can see you focus on a specific objective of entrepreneurship, which is to create more employment opportunities, but do you think there might be other broader aims for entrepreneurship in general?

Policymaker: Of course, there are economic aims. You can see that it is mainly SMEs that contribute to the world's economies. Another thing, entrepreneurship in higher education institutes should be qualitative, which means that students should gain entrepreneurial knowledge and use this knowledge to start up SMEs. Therefore, yes, indeed it contributes. In developed economies, there are large companies, but they are few; the majority are SMEs. If you want to develop your economy, you definitely need SMEs. In Oman, there are many [...] industries; these industries open up opportunities for SMEs. As we create more SMEs, we eventually add value to the economy. For example, the price of one barrel of raw oil is 20 dollars. But if you use this barrel in [...] industry, it will give you 60 to 70 dollars. If you allow SMEs to benefit from this [...] industry, you will get 200 dollars out of one barrel. Thus, SMEs bring in more income into Oman's economy. Another thing that I understand, even though I am not an economist, is that only a certain portion of employment should be in the public sector as it is mostly a service sector, but the majority of people should be in the production sector, which is the private sector. The bigger the production sector, the higher the income. So yes, the broader aim is to create a stable and growing economy, which can produce high income for the country. Finally, the main aim of the government is to improve the living standards of its citizens, so developing the economy means improving the lifestyle of Omanis. [Male policymaker from MOHE, interview in English]

The purpose is clear from the above quote that the focus is on strengthening the private sector and diversifying the economy through SME expansion. This interview finding (on

entrepreneurship and the private sector) is also confirmed in the survey results as Figure 6.3 below shows – HE students perceive similar intentions.

Figure 6.3 Will Omani entrepreneurs strengthen the private sector? Student responses by gender.



Source: Survey data

Complementing the survey data presented in Figure 6.3, which shows that more than half of male and female respondents strongly agree that having more Omani entrepreneurs will strengthen the private sector, one open-ended question asked students to suggest ways of expanding Oman’s private sector in order to diversify the economy. Around 67% of the students recognised entrepreneurship as an effective means of achieving this. Likewise, having experienced the fluctuation in energy prices first-hand, almost all respondents agreed that relying on energy revenue is risky. They know the possible consequences of those fluctuations, including a reduction in the number of public sector jobs.

Because the ability of Omanis to access private sector jobs has remained limited since the 2000s due to expatriate domination (see more reasons in Chapter 3) (Al-Lamki 2005), this has slowed down the Omanisation process. Views on Omanisation are mixed, with half of entrepreneurs and students and only one lecturer interviewed affirming the need to Omanise labour. This quote provides an example:

The private sector is, as I see it, becoming entrepreneurial. The government has promoted privatisation, which has allowed many sectors to become private

companies. The government has also promoted Omanisation to replace expatriates with local people [...] It [entrepreneurship] might help in this. [Saoud, male student from Study Site Three (Business), interview in Arabic]

Few lecturers may support this policy because some of them are expatriates themselves. On the other hand, 40% of interviewees (i.e. 12 HE students, 8 faculty/staff and 6 entrepreneurs, but not the two policymakers whose goal was to reduce expatriate labour as much as possible) pointed to the fact that expatriates do many of the jobs that Omanis are unwilling to do, as this student explained:

Student: In terms of employment and having expatriates in many jobs in Oman, I do not have clear view in this. But I think their existence is important because most of them were recruited for jobs that Omanis are not willing to take. You cannot see Omanis in construction or road building. Also, in sectors we do not have expertise in, and that Omanis do not have that expertise. For example, we have some foreign companies like the Belgian company in Duqum city. We cannot replace this company with an Omani company as there is not one that can. In terms of business, we would like to be independent and grow but the reality is we still need expatriates in these businesses. For example, in my major of programming software, I still need some expatriates from India to help me in that. I will learn from them but for now we do not have any experts in programming in Oman. So yes, we need expatriates in SMEs, and we cannot give them up yet. We want to have more Omanis, but if there are not any, we have no other option. [Hala from Study Site One (business), interview in English]

However, the student below explained why recruiting Omanis is preferable:

Interviewer: Who will you recruit? Omanis or expatriates?

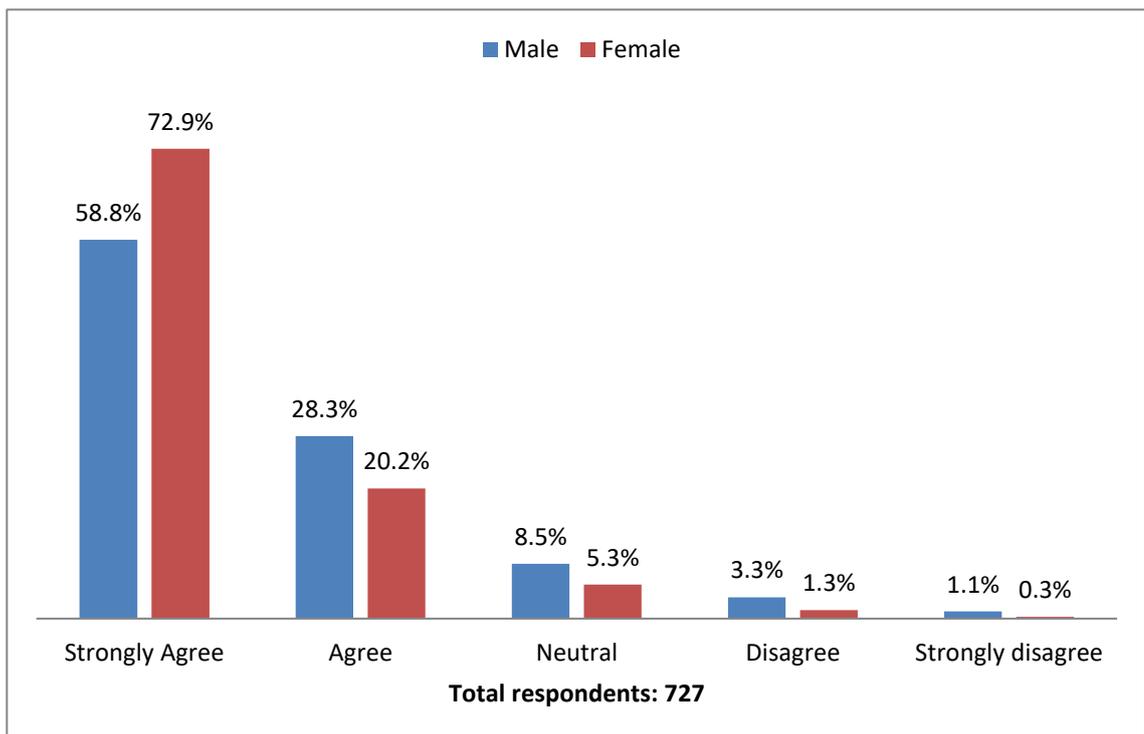
Student: Omanis of course

Interviewer: Why frankly, please?

Student: I have this spirit of belonging to this home country. I know that many people prefer to recruit expatriates as they claim they are more productive. But I think Omanis are more productive if given a chance. [Hasan, male student from Study Site One (business), interview in Arabic]

Figure 6.4 illustrates that students believe that starting more SMEs will contribute to the Omanisation process.

Figure 6.4 Will starting more SMEs create more private sector jobs for Omanis? Student responses by gender.



Source: Survey data

More than half of respondents strongly agree that starting up more SMEs will create more private sector jobs for Omanis. Both policymakers interviewed cited Omanisation as a high priority, explaining that the growing number of foreign workers would eventually hold back employment efforts, particularly in SMEs (see Section 4.6.1 for the percentage of Omani employment in SMEs). Most Omanis prefer not to start SMEs because this requires taking a greater risk compared with getting relatively risk-free jobs in the public sector. By contrast, expatriates do not have access to those public sector jobs and the almost complete absence of Omanis in the private sector leaves this entire sector employment for them.

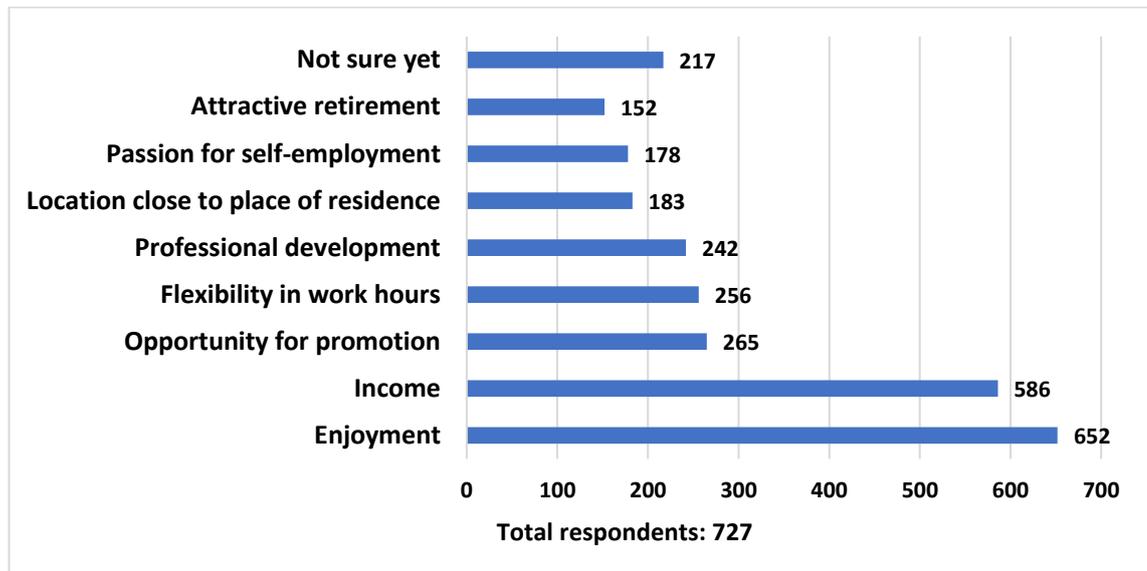
The fact that the State provides employment and free or subsidised services (health, education, electricity, water, housing, etc.) has encouraged this dependency. These socio-economic features of Omani society (see Chapter 3) appear to clash with the key entrepreneurial values of independence, industriousness, and risk-taking.

6.3.3. Post-graduation Intentions

Despite the realisation of the importance of entrepreneurship as an alternative to private or public sector employment, few Omani students consider it as a first choice following graduation. Only 3 interviewee students, out of 32, and 9 out of 63 survey students who took the programme indicated that they will start a business post-graduation. Oman's students retain the hope of finding a public or private sector job regardless of the

country's economic situation and seem resistant to the idea of starting a business immediately after graduating. Two of the main reasons for choosing their preferred sector were revealed by a previously published student survey (see Al-Shabibi 2017): income and enjoyment⁹⁶. Entrepreneurship is not associated with the latter in the same way as public or private sector employment, as this Figure 6.5 shows:

Figure 6.5 Reasons for Choosing Preferred Sector (according to Survey Data)



Source: Survey data, and also published in Al-Shabibi (2017)

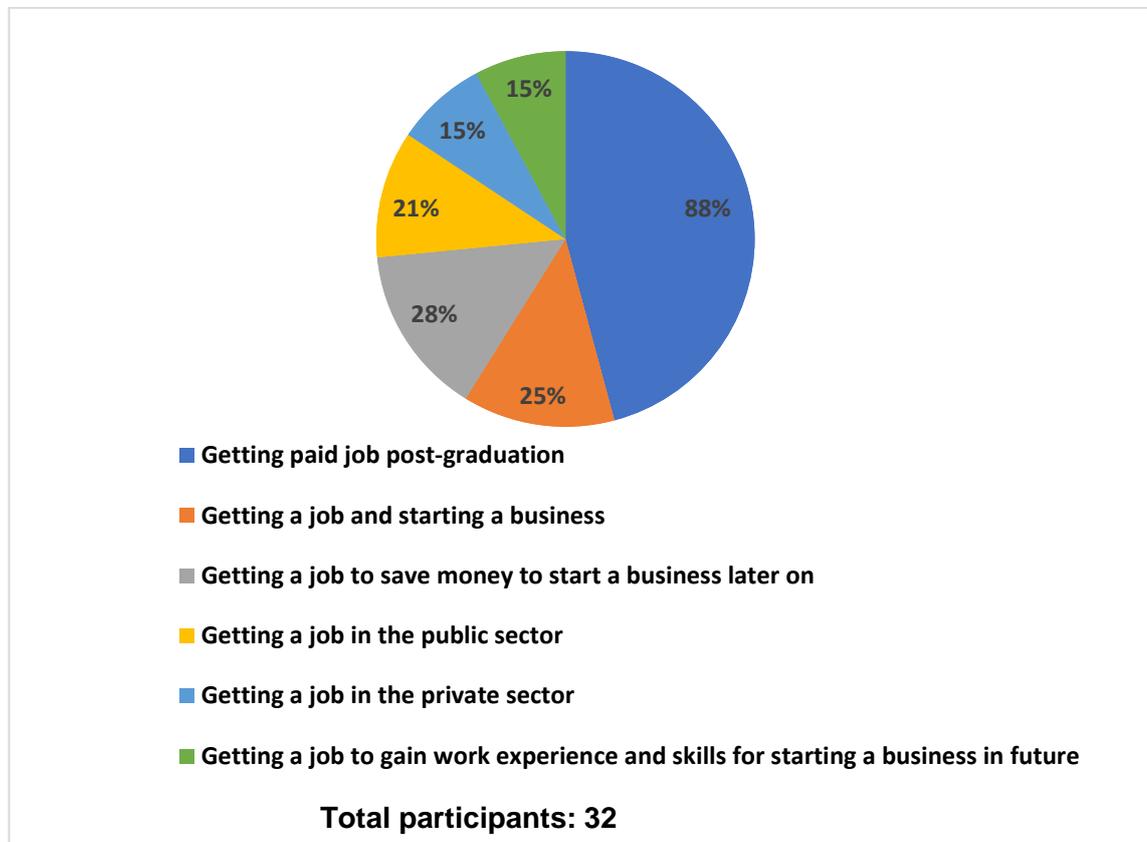
Interviews undertaken for this thesis revealed further reasons for these attitudes and preferences regarding post-graduation employment pathways. While these preferences do not seem to favour entrepreneurship, as seen in Figure 6.6 below, the first and most common reason cited was to acquire adequate financial income to start a business, suggesting a long-term intention but caution regarding starting a business right after graduation⁹⁷. Noticeably, access to financing and gaining experience are key determinants in the OECD/EUROSTAT measurement framework (see Chapter 2), indicating their significance for entrepreneurship. Passion for self-employment was acknowledged by 24% of the total 727 survey students which is not far from the 15% of the total 32 interviewed students who mentioned passion as an entrepreneurial trait (see Chapter 5, Table 5.3). Despite this moderate interest to passion among surveyed and interviewed students, this does not transferred for the majority into true intentions for

⁹⁶ Interestingly, enjoyment is one of the three entrepreneurial performance indicators in OECD/EUROSTAT framework (Chapter 2). This indicates that there are positive attitudes towards entrepreneurship among survey participants.

⁹⁷ The percentages distributed in the figure add up to more than 100% because some students are included in more than one category. For example, students who mentioned getting a paid job are also included in the public or private sector categories given that both sectors provide paid jobs. Also, some of these same students were included in the categories of reasons for getting a job such as saving money, gaining experience etc.

entrepreneurship, rather it led to only general positive attitudes (as discussed in Chapter 7).

Figure 6.6 Students Post-graduation Career Intentions (according to interview data) – Multiple Responses were Possible⁹⁸



Source: Interview data

The above student interview data in Figure 6.6 indicates that some of the interviewed students who took the EEP in fact intend to start a business. The data suggest that students' financial resources (28%) are more important than lack of experience as reasons to increase intentions for entrepreneurial activities (they get a job to save money for starting a business later more often than to gain experience of running a business(15%). As discussed in Chapter 2, financial support to prospective entrepreneurs is key measure for entrepreneurship development. However, most interviewees said that they do not intend to become entrepreneurs right after graduation and their preferences are limited to the service and oil sectors, which are low risk.

This intention does not align with the government's urgent priority to graduate entrepreneurs and diversify the economy by developing new sectors such as fisheries,

⁹⁸ As an attempt to address one of the survey's weaknesses which is survey questions being structured (discussed in Chapter 4), and due to likelihood that participants would have more than one reason. This flexibility allowed to capture most participants' perceptions on this question.

logistics, and tourism (Tanfeedh 2017). Some interviewed students did mention tourism but none of them mentioned the other two.

Additionally, none of the students expressed a desire to start a business in medium or heavy industries⁹⁹ such as manufacturing products or medicines. This data show that the EEP is having a partial impact, but not to the extent to fulfil the government's ambitions (it remains to be seen if the programme has long-term success in this regard). Unfortunately, apart from this thesis, there is no other research that measures the EEP's outcomes.

What is clear from this study's data is that investing in an educational programme such as the EEP alone might not achieve the government's desired objectives. This finding echoes the extensive criticism of HCT arguments on the link between education (i.e. lifelong learning), performance, and future career choices (e.g. Rees et al. 1997; Wolf 2004), and reveals the need to emphasise other social and cultural capital aspects (amongst other aspects) alongside investment in education to achieve economic development (e.g. Keeley 2007; Gillies 2017). In the following section, some of these factors are discussed.

6.4. Cultural and Social Factors¹⁰⁰

This section highlights the impact of culture, society¹⁰¹, family, the rural/urban divide, friends, and social media, on student understandings of entrepreneurship. Cultural and social aspects are important in shaping participant understandings of and engagement in entrepreneurship in Oman. One interviewee said:

I think Omanis are the best in the region in terms of their attitudes in terms of style and cultural context and awareness and I have no doubt that the students if they are really given proper guidance and lessons, they will be brilliant entrepreneurs. Many of them will be no doubt. [Musab, male lecturer from Study Site One, (business), interview in English]

Hayton et al. (2002, p. 34) suggested a relationship between contextual factors and entrepreneurial outcomes and that culture may be described as a 'moderator' of this

⁹⁹ The Oman Ministry of Commerce and Industry categorises some of these industries as "medium". For example, these include the fabrication of school stationery, fish, frozen chickens, PVC pipes, steel, medical supplies, and solar heaters. (see Oman Ministry of Commerce and Industry 2014, p. 135)

¹⁰⁰ Society's shared beliefs and values (Herbig 1994)

¹⁰¹ Recent studies differentiate between cultural and social factors, e.g., the former is broader and deals with material aspects and the latter deals with people (Orford 2017) whereas older studies regarded them as similar concept (e.g., Gillin 1954). To avoid any confusion between the two concepts, I choose to put them in one category as distinguishing between the two is not important for this thesis.

relationship, e.g., cultural characteristics complement the political and economic factors influencing entrepreneurship. The above authors are of the view that entrepreneurship is enhanced by cultures “that are high in individualism, low in uncertainty avoidance” (Hayton et al., 2002, p. 34). These values have been associated with the entrepreneurial traits of risk-taking, independence (locus of control), and innovativeness (Thomas and Mueller 2000). Uncertainty avoidance (also called risk aversion in the following section) and individualism (Section 6.4.2), which are also two of Hofstede’s five cultural dimensions (see Chapter 2), are also used below to analyse the importance of cultural factors in Oman.

Other factors, which evolved persistently from the data, (see the themes coding in Appendix 10) are family and friends in Section 6.4.3, place, social media, and the experience of competition in Section 6.4.4, religion in Section 6.4.5 and finally gender roles in Section 6.4.6. Very little research has investigated the impact of some of these factors – in particular the influence of friends, place and religion – on the formation of understandings of and engagement with entrepreneurship.

6.4.1. Risk Aversion

The data show that Omani society is high in risk aversion, as explained by one College Dean:

Interviewer: Excuse me Doctor, but why do we get the impression that Omani youth are not very keen on this particular sector [entrepreneurship]?

HE Manager: It is the fear of failure. Additionally, making comparisons between Omanis and non-Omanis, like Singaporeans or Germans, has a negative effect. I once heard that basic education begins with entrepreneurship being taught during childhood, which is a new perspective of the situation. However, here in Oman, there is always a fear of failure and of the loss of financial capital, although there are now institutions that will fund you for up to 3000 riyals. Nevertheless, they have complicated conditions, such as the demand for replenishment and the requirement to avoid duplication of other projects, so it’s a risky business. [Female HE manager in Study Site Two (Engineering), interview in English]

One reason for this is that the State is the main employer of Omani citizens, either in government ministries or organisations (see Beblawi and Luciani 2015). This is partially because of a culture which developed in the 1970s due to large oil revenues, but also because of other institutional structures that encourage people to see government employment as the best career pathway, including: a secure job that is almost impossible to lose, guaranteed retirement payments until death, and guaranteed wage increases

every 4 or 5 years. All of these factors have contributed to the 'rentier mentality', which has resulted in over-reliance on natural resources. From a cultural perspective, this sits uncomfortably with key values of entrepreneurship, such as dynamism, innovation and risk-taking (Schumpeter 1989). This is why a culture of entrepreneurship might not yet be embedded in the country, despite the aggregate efforts made since the beginning of this century.

Despite this perception, the majority of interviewed students, all of whom had completed the EEP, did not object in principle to concepts such as risk-taking or hard work. However, openness to risk-taking (Herranzet al. 2015) and actual engagement with entrepreneurship and risk-taking (and starting a business) are two different things. The study can link this risk avoidance among students to other cultural and social factors which appear more impactful on students than the EEP despite the inclusion of the importance of risk-taking in all study sites' EEP curricula (see Chapter 7).

6.4.2. Individualism and Changing Patterns for Entrepreneurship

Omani society's view of the entrepreneur is changing rapidly to one of increasing support, which as one entrepreneur reported was not the case 15-20 years ago. Around 17 of interviewed students expressed this positive view, which also resonated with all entrepreneur perceptions. However, some interviewees declared that this supportive view depended on the size of the business, the success of the entrepreneur, or the entrepreneur's income or location:

Student: People focus on the salary and where it comes from. They think about if that person could lose his money unlike the person who works in the government. Also, it depends on if the business of that person is small or not?

Interviewer: So, the size of business matters?

Student: Yes.

Interviewer: how so?

Student: If a business is large, it means it generates more income. It would be easy for someone who has a big company to get married, not like a small grocery store. [Salim, male student from Study Site One, (business), interview in Arabic].

The data also indicate that Omani society is becoming less traditional and conservative, with more liberalised and individualistic group norms. This quote is illustrative:

Perhaps some people's marriage proposals were turned down because they do not have a permanent job even though their income might be three times more

than a company or government employee's. However, this is beginning to change. People are starting to change their view about entrepreneurs, especially when people see them being successful and making money. This also encourages other people to be more independent and decide to start a business. It takes time but it is changing [Successful male entrepreneur (construction), interview in Arabic].

Some studies suggest that societies with low levels of individualism are less likely to be entrepreneurial or innovative (Shane, 1992; Makenu and Neupert, 2000). According to Hofstede (Hofstede 2011), individualism means that the individual is a separate entity making and taking responsibility for his/her own choices. Although various aspects of Omani culture (including religion and social factors) seem to undermine Omani students' individualism, particularly in the case of women, the previous chapter stated that key entrepreneurial traits, namely innovation and creativity, risk-taking (low uncertainty avoidance), and independence (locus of control) are being viewed more positively nowadays.

6.4.3. Family and Friends

A recent study by Meek et al. (2010, p. 493) found that "the norms of family interdependence" can provide crucial assistance for entrepreneurs. Data show that family has a clear impact, particularly if a family member is already running a business. She/he can be a valuable source of knowledge for a student and generate interest in starting a business. Close observation of what the relative does and assisting in the relative's business can allow a student to learn about entrepreneurship in a real-world environment. The following quote is illustrative:

Interviewer: Can you tell me more about your family business?

Student: Yes, my father and two of my uncles are partners in halwa (Omani sweets) factory. You know how business in Oman, most family participate in it. I go to help when I have holidays. [Maysa, female student from Study Site One (Business), interview in English]

The above quote is evidence of social capital¹⁰² between this student and her family member, which is a basis for knowledge, resources, trust, reciprocity, and cooperation (see Baron et al. 2000), that may encourage entrepreneurial engagement.

¹⁰² Social capital is "social networks, the reciprocities that arise from them ,and the value of these for achieving mutual goals." (Baron et al. 2000, p. 1)

However, it is not always necessary for a family member to actually be an entrepreneur or run a business; the desire to start a business could merely be the result of a conversation with a relative who is not an entrepreneur but has some knowledge of entrepreneurship, as one student indicated:

Yes, that was at the beginning, but then in my second or third year at college, a family member had a long conversation with me, which changed my way of thinking. He asked me what my aim was. I told him that I would like to make a lot of money and have a high income. He asked me what I was going to do to achieve this. I told him that I would graduate and seek a job at PDO. He replied that this is not possible for a number of reasons. First, PDO, despite paying well, would not make me as rich as I wished. Second, starting an SME would be the only way to achieve this dream. He didn't say I shouldn't look for a job, but rather that I needed to seriously consider having my own business in the long run. Since that conversation, I have been thinking seriously about starting a business. [Maher, male student from Study Site One (Engineering), interview in Arabic]

This conversation indicates the extent to which a sibling (or other family member) can influence critical decisions such as the choice of occupation¹⁰³. The interview finding here of the importance of family influence on their children is triangulated with this study survey results where parents' educational level and professional background show some influence on their students' understandings (see Chapter 5, Section 5.3.1.1).

This is not unusual, given the primacy of the family unit in Middle Eastern societies (Fakhr El-Islam, 2008). Large extended families and more specifically, parents, help make Omani society low in individualism, as previously explained. Many interview extracts confirm the importance of family influencing the views young people have on starting a business.

On the other hand, the influence of parents (or other family members), can also reduce the propensity for entrepreneurship within a society (McClelland, 1961). Indeed, according to the survey data, in Oman family support of entrepreneurship is often weak. In the survey, the father's and mother's education and work background seems not to influence students' intentions. However, as mentioned in Section 5.3.1.1, no statistical

¹⁰³ Several studies link the entrepreneurial trait to occupational choice, assuming that the degree of risk aversion towards becoming an entrepreneur versus a paid employee will determine an individual's choice of occupation (Freytag and Thurik 2007). Wennekers et al. (2007, p. 144) suggest that "the better the prospects of entrepreneurial income as compared to the wage income of employees, the more people will be attracted to self-employment".

testing was conducted to confirm or disprove this descriptive observation. The interview data discuss the reasons for this propensity, such as unstable income:

Interviewer: What about your family?

Student: Nobody from my family is an entrepreneur, we have the idea in my family that entrepreneurs do not have stable source of income.

Interviewer: How does that make you feel?

Student: I feel that I will look for secure job in one of the governmental organisations. [Waleed, male student from Study Site Two (engineering), interview in Arabic].

Other interview extracts indicate other reasons such as parents who do not want a risk-taking career for their children, an unclear retirement future, and the difficulty of getting married.

Another influence is potentially exerted by friends, although to a lesser extent than family members. Only 15% of interviewed students mentioned that a friend had helped them to understand entrepreneurship and/or to develop a positive attitude to it. Nevertheless, one female student had developed a positive attitude merely by observing how her female friends had succeeded in their businesses:

Speaking frankly [...], if a job doesn't completely suit me, I look at all the successful girls, my friends, for instance - God bless them - who get high income out of their own businesses, and I feel jealous; I want to compete with them to become something [an entrepreneur] like them. I have many ideas, so we share our ideas and talk about our projects; this is very important. [Dalal, female student from Study Site Three (Business), interview in Arabic]

It is obvious that the interviewee's friends' successful experience also shaped her understanding of entrepreneurship and encouraged her to follow in her friends' footsteps.

6.4.4. Place, Social Media and Competition Experience

A further important factor in shaping understanding of and engagement with entrepreneurship was the place or society in which they lived, or their 'surroundings', which was highlighted by about half of the students. It was observed that students from the capital, Muscat, or major cities like Sohar or Nizwa, had more access to knowledge about entrepreneurship and SMEs and thus held more positive attitudes about them, as indicated:

The surrounding place is important. If most people have a business, this will encourage others to start their businesses. In a rural area, it is not common to start

a business. I will say the surroundings are not encouraging. Not like in Muscat where I study [Hasan, male student from Study Site One (business), interview in Arabic]

In addition to the above, social media is undoubtedly a powerful tool for disseminating ideas, particularly among the youth (O'Keeffe and Clarke-Pearson 2011). The data show about 18 out of 58 interviewees mentioned the impact of social media in engagement with entrepreneurship. One student talked about how social media caused most of her friends to think seriously about entrepreneurship:

Interviewer: OK, what about your classmates and friends, do they have similar intention?

Student: I think that most my friends' intentions have changed towards entrepreneurship because of the social media which has great impact in spreading this idea. Most of the people I have seen are thinking of the current situation of the country that is of the hardship of finding a job and the other alternatives of making money. Most are interested in entrepreneurship. Some of them even started mini-businesses which do not give them a lot but at least they give them some experience. [Aysha, female student from Study Site One (Engineering), interview in Arabic]

Looking at friends talking about their businesses or advertising their products through social media and making profits encourages others to consider doing it, as friends have an impact on entrepreneurial intentions (as discussed in Chapter 2, Section 2.5.4). Moreover, such businesses do not require rent, staff, or any complex skills, only social media skills, which are generally quite common among young people (Correa 2016). This makes the businesses easier to run and may motivate people to start them.

Finally, in addition to studying entrepreneurship at college or hearing about it from a family member, friend, or in social or news media, some of the students had experienced it in real-life situations or in a competition. For example, a few of the students had already started a business while still at school, as is the case with the student cited below:

Interviewer: So, this is an excellent experience of an entrepreneurial activity in real life. Can you tell me about this experience?

Student: I was a bit afraid to launch this business at the beginning, but then when I started, I felt it was not that difficult. Yes, there was a lot of effort put into this business, especially at the beginning, but I am now more comfortable, and I have an income from it [...] Initial failure made me more determined, because I am a

positive person. [Nasser, male student from Study Site Three (Business), interview in Arabic]

The above participant believed that this experience had enabled him to gain self-confidence, determination, and a positive attitude despite encountering problems throughout. This is consistent with Robinson (1994) who found that experience encourages people to become entrepreneurs as much as general education does.

6.4.5. Religion

Religious considerations, as part of Omani culture, appeared to result in positive attitudes towards entrepreneurship amongst all participants.

Interviewer: How does your religion affect you in terms of entrepreneurship?

Student: All Islamic teachings encourage us to work no matter how hard that work is. Islam calls us to be productive and stay away from being lazy. [Ahmed, male student from Study Site One (business), interview in Arabic]

Despite this, a minority of interviewees described certain restrictions they claimed were due to Islamic principles. For example, one participant stressed the importance of gender segregation in all entrepreneurial activities:

Interviewer: OK, what about the teachings of the Islamic religion, do you feel they encourage entrepreneurship, particularly for women?

Student: The Islamic religion encourages entrepreneurship, but for a woman starting a business, there are rules for that [...]. She must not mix or communicate with men directly; this is not accepted by the religious teachings or the society around me. [Marya, female student from Study Site Two (Engineering), interview in Arabic]

It is clear that religious influence can be a strong cultural determinant (Carswell and Rolland 2004). However, overall, Omanis feel that religion supports making a profit (Allen Jr 2016), as in the case of entrepreneurial activities. It should be noted here that most of those who mentioned religious restrictions were female. Gender is discussed in more depth in the following section.

6.4.6. Gender Roles in Urban and Rural Areas

This section discusses the significance of gender in understanding entrepreneurship and the development of entrepreneurial attitudes and skills. First, gender and geography interact in shaping entrepreneurship experiences, as rural areas in Oman seem more conservative regarding gender roles. As this female interviewee stated, parents in

Muscat are more likely to be open-minded and it is relatively common for women to start businesses, but this was not the case in the rural area that she came from:

Yes, I think so. Most SMEs and supportive agencies are in Muscat. People here are more open-minded, unlike rural areas in Oman. It is OK here in Muscat to mix with men and do business as a lady. I can see my friends from Muscat have no problem and their parents do not prevent them from starting up businesses. But for me, being from a rural area, it is difficult. My parents will say, 'Do as your older siblings, finish your studies and get a job'. [Hala from Study Site One (Business), interview in English]

However, attitudes are changing rapidly and many women in Oman, even in rural areas, now run businesses, as another female said:

Interviewer: So, do you feel that society views female entrepreneurs as normal?

Student: Yes, the reason is that it [entrepreneurship] is widespread among women now. [Hala, female student from Study Site One (Business), interview in English]

This changing view regarding female entrepreneurs depends largely on the place where women live – the woman above stated that she is from a rural area, where some additional resistance to women becoming entrepreneurs remains when compared to urban areas. In urban areas of the capital city, it is unproblematic for a woman to start a business:

Interviewer: As an Omani lady, how do you think Omani society views a female entrepreneur?

Entrepreneur: There's a lot of support now for Omani entrepreneurs. I have been involved in a lot of initiatives regarding this [...] Therefore, eventually, I started receiving invitations to these women's support programmes and I became one of the people who ran them as well. So, there's a lot of support for women in business, in terms of the government, but in terms of culture, I would say it's fine in Muscat, but in other areas, I know that some ladies face problems. But for girls who really have entrepreneurial minds. I would say don't stop, we have seen people come and go from Al-Buraimi and from Al-Dakhiliyah. It was because they believed in what they were doing. [Fail female entrepreneur (Food services), interview in English].

The above quote indicates some women still feel resistance from parents in rural areas, and the evidence is more generally supportive of this cultural aspect, i.e. that gender

plays some role in influencing entrepreneurial engagement depending on whether someone is from a rural or urban area.

6.5. Conclusion

This chapter has shown that despite government exhortations and some evidence of government support, most students seem unlikely to engage in entrepreneurial activities. It is important to emphasise the difference between general positive attitudes towards entrepreneurship, expressed not only by the majority of students but also most other stakeholders, and the very few students who showed intentions and mindset changes towards pursuing entrepreneurial activities post-graduation. Students' positive attitudes are largely a result of possessing clear understandings of what entrepreneurship means – even if some (policy makers) understand it in less well-rounded ways than others. Exploring various study participant perceptions helps to elucidate the influences of different contextual factors. The factors analysed vary in their degree of significance to entrepreneurial intentions and understandings.

This chapter suggests that a range of different factors coalesce to produce particular patterns of likely engagement with entrepreneurship. These patterns differ marginally for some groups but overall suggest that whilst there is evidence of high regard for entrepreneurial activity or entrepreneurial ambitions there is more generally a cautiousness when considering engagement in it. The next chapter explores the role of the EEP in improving levels of engagement.

First, there has recently been strong political desire to enhance entrepreneurship in Oman and top-down efforts, typical of a rentier state, to improve engagement in such activity; the conceptualisation of entrepreneurship informing these efforts has been heavily economic. By contrast, other policy-related factors appear to act as obstacles, such as complicated rules and regulations or lack of funding¹⁰⁴.

Regarding the cultural dimension, there is evidence that culture and society have some bearing for engaging in entrepreneurial activity. A range of factors e.g. family, social media, friends, as well as aspects of religion, gender and place where one studies can be shown to bear some influence – both positive and negative - on the likelihood of an individual to be engaged in entrepreneurial activities, such as starting a business. Furthermore, evidence also indicates that Omanis are becoming more 'open' to entrepreneurship by expressing positive attitudes to innovation, risk-taking, and independence (locus of control), despite a certain amount of restrictive cultural, religious,

¹⁰⁴ Regulatory framework, culture and access to finance are key entrepreneurial measurements in the OECD/EUROSTAT framework (see Chapter 2).

and social aspects. However, there remains a propensity to favour employment in the public or private sector, rather than entrepreneurship.

From what is quite a mixed picture in terms of sound understandings and generally positive attitudes but very limited indication for entrepreneurial engagement, I now explore the potential of the EEP. In essence, I examine the government's specific effort to develop entrepreneurial skills in those participating in higher education and the extent to which a dedicated entrepreneurship education programme might provide the skills, confidence and attitudes to encourage young graduates to become entrepreneurs and facilitate economic diversification, i.e. the likelihood that such a programme will overcome the barriers discussed in this chapter.

7. Chapter Seven: Skill Formation for Economic Diversification and the EEP

7.1. Introduction

Chapter 5 indicates that students have developed understandings of entrepreneurship and generally positive attitudes towards entrepreneurship. However, this is not matched by intentions or mindset changes with regard to engagement in entrepreneurship post-graduation in Oman. In this respect, whilst attitudes towards entrepreneurship are largely positive, student ambitions continue to focus on public sector employment. Chapter 6 establishes and discusses the limited level at which engagement with entrepreneurship currently exists, in relation to numerous 'cultural specificities', and which the EEP aims to address. This chapter discusses the likelihood of the EE policy on addressing these engagement issues by reflecting on the EEP's design and implementation, and the impact of the contextual factors identified in Chapters 5 and 6.

Therefore, this chapter attempts to address research objective 3 on the perceived potential of Oman entrepreneurial skill formation policy through the lens (as stated by sub-question 4) of the EEP. That is by examining the EEP's design and implementation, to overcome barriers to entrepreneurship, expand entrepreneurial skills supply and increase the numbers of graduates becoming entrepreneurs. In essence, the chapter looks at why the policy's intended results have not been achieved – chapter 6 clearly indicates that the current EEP cohorts' intentions after graduation is not for business start-ups. Hence, through the EEP, I explore the limitations of education policy in achieving its objectives and, in this respect, the broader potential for entrepreneurship education programmes to deliver on the intentions of policy – in this case a more Omanised and a more diversified economy. Identifying stakeholders' reasons for the policy's limitation (in this chapter), after acknowledging the importance of other contextual factors (Chapter 6), contributes to addressing the main research question (see Chapter 1).

The chapter neither evaluates the EEP's ability to deliver certain academic outcomes nor does it measure its long-term social or economic impact (see also Chapter 4). Rather, it attempts to understand the experience of the EEP from the perspective of different stakeholders, as a way of understanding skill formation as a route towards economic diversification. The chapter is divided into three parts. Section 7.2 explores Oman's approach to introducing entrepreneurship teaching in the higher education sector. It has done so with a central policy that has made the EEP programme mandatory in HEIs

(since 2014), though with different curricula across them¹⁰⁵ and then explains the impact of HEI rankings and disciplines of study. Section 7.3 investigates the implementation of the policy by outlining how the programme was adapted across and within different HEIs. It explains the programme's key content and pedagogy, as well as its potential to teach the nature of entrepreneurship and thereby increase the likelihood of changing students' attitudes and intentions. Section 7.4 concerns the programme's capacity to develop entrepreneurial skills and identifies its role in developing human capital to contribute to economic diversification. Finally, the chapter discusses the EEP's likelihood (in the long-term) to tackle some of these contextual factors and those that the EEP is unlikely to address (discussed in Chapter 6).

7.2. EE Policy: Oman's Approach

This section discusses three aspects of Oman's approach. First, it analyses the policy of introducing entrepreneurship in the higher education sector without a previous introduction in primary or secondary school (basic and post-basic education in Oman). Second, it discusses the mandatory nature of the EEP¹⁰⁶. Third, it examines how allowing HEIs to implement their own curriculum has led to variations in policy implementation. Finally, this section discusses the impact of HEI ranking and discipline of study on students' entrepreneurial engagement.

7.2.1. Introducing Entrepreneurship in Higher Education

Oman chose to implement the EEP in the HE sector to realise immediate gains through stimulating undergraduate students to start a business post-graduation. The focus of the programme on HE is justified by its greater potential to lead more directly to business start-ups than introducing it in the primary and secondary school (basic and post-basic education in Oman) sectors, as this policymaker expressed:

We believe that this programme will gain them [students] experiences for private jobs especially since it is envisioned that there will not be enough government jobs in future. [...] In addition to this, there was a belief at the Ministry that the future of employment will be self-employment. It will be graduating students with entrepreneurial knowledge, skills and values. [Male policymaker from MOHE, interview in English]

¹⁰⁵ It is worth noting here that although around 23 HEIs have not yet made the programme mandatory and others have only required it of students in certain disciplines, i.e., Study Site One, all HEIs must eventually require all enrolled students to take it.

¹⁰⁶ This study defines attitude as a changing mindset from not thinking or thinking negatively about entrepreneurship into thinking about it positively. This positive thinking, however, does not necessarily lead to becoming an entrepreneur.

Policymakers focus on HE because of the maturity of the students, their proximity to the labour market, and the return on such an investment. Introducing these measures in primary and secondary education would be more expensive due to the larger number of educational institutions, however, most lecturers and students felt that EE should still be taught at these levels . A lecturer explained the reasons as follows:

It should start at high school because this might make a few of these students do not pursue their higher education but become entrepreneurs right after they finish their high school. They may think about starting a business, so if you would introduce this type of course, you create a spark on their mind. [Hadi, male manager and lecturer from Study Site Three, (business), interview in English]

Introducing entrepreneurship in HE does not preclude the need to instil entrepreneurial values before university according to most students, lecturers and managers. Earlier educational interventions would ensure that students have some basic entrepreneurial skills when they start post-secondary education:

I think it will be great to have it in schools but not in grade 12. Maybe you can start teaching some basic things about entrepreneurship and economics in schools and then more advanced content and the practical part in college. This will be smoother for introducing entrepreneurship. [Sarah, female student from Study Site Two, (engineering), interview in Arabic]

It is not clear why Oman's approach limits EE to the HE sector. Both the literature e.g., Elert et al. (2015) and this study's data point towards the shortcomings resulting from the exclusion of EE from primary or secondary school The literature (e.g., Gibb 1993; Carberry and Baker 2018) also points towards external factors such as culture which affect successful implementation of EE. There are several contextual factors that appear to undermine entrepreneurship growth in Oman and which hold back the EEP's programme's potential, such as the rentier mentality, reliance on government employment and the impact of family and friends (see Chapter 6).

7.2.2. Mandatory EEP Policy

The second feature of Oman's approach to entrepreneurship is making it mandatory in an attempt to make this programme effective in promoting economic development. The majority of policymakers, lecturers and managers indicated that the mandatory character of the policy increases take-up EE and makes the programme effective. An Omani faculty member said:

I think it should be compulsory because if you keep it as optional many students will not take it. Students from pharmacy and engineering will not want to take the course as they do not know about business. But making it compulsory, you are giving them the opportunity to learn new thing. [Faisal, male lecturer from Study Site Three (business), interview in English]

An expatriate lecturer noted the importance of risk-taking and that making the programme mandatory could help to create this spirit:

As I told you, people don't want to take risks, so by making the programme compulsory, it will give the students the knowledge on the nature of entrepreneurial activities, and they might actually think about it as an option. [Hamdan, male lecturer from additional Site B (business), interview in English]

This desire for the programme to be compulsory is to be expected from the teaching staff as this increases the demand for lecturers. However, despite the government's request to make the EEP mandatory, half of the 59 HEIs are not currently delivering it (since initially analysing these data in 2018, 5 more HEIs have begun offering the EEP as a compulsory program). One MOHE official explained:

Some of the HEIs expressed the need for more time to design the curriculum or to hire lecturers or train their existing lecturers to be able to teach it. However, eventually all HEIs are expected to make it compulsory. MOHE will make sure this happens soon. [Male policymaker from MOHE, interview in English]

It is clear that the government's rationale for making the policy mandatory resonates with the urgency it feels to diversify the economy, as documented in Chapter 3. However, this policy seems to have been hastily rushed through and the HE sector is struggling to accommodate the programme.

On the other hand, about half of students thought the EEP should be optional, saying entrepreneurship is a personal choice:

I think it should not be mandatory, as not every student wants to graduate to become an entrepreneur. After all, it's a personal desire. [Salim, male student from Study Site One (engineering), interview in Arabic]

Most of those who opposed the compulsory character of the EEP are engineering students, who may be less interested than other students in becoming entrepreneurs, given the options they have available in the private sector, including in oil companies which traditionally offer attractive salaries and benefits. Other students such as those

business or management majors, frequently aim to get jobs in the public sector (see Figure 6.6.).

In fact, students explained that they consider the EEP as another mandatory course that they need to take and pass:

I am not sure if I want to take it [the EEP], but I have to, I have no other options. I just want to complete my degree and get a job. [Issa, male student from Study Site Three (Business) interview in Arabic]

Students' criticisms highlight that the policy runs counter to a critical principle of entrepreneurship, freedom of choice (Gielnik et al. 2015). Gielnik et al. (2015) found that "free will" and entrepreneurial passion are positively linked to the success and growth of entrepreneurship. This personal desire is an important individual factor which appears to be more significant than a mandatory academic course¹⁰⁷ (see Section 5.3).

7.2.3. Central MOHE Policy and Different Curricula across and within HEIs

Oman's approach to the implementation of the EEP policy is based on the use of a unified guidebook for teaching entrepreneurship while giving each HEI the freedom to design its own curriculum and course syllabus and select teaching materials and content. Data indicate variations in implementation as a result of this, which have caused inconsistencies in the programme's adoption.

Furthermore, a policy of using various curricula across a large number of HEIs will mean that the probability of variation from institution to institution is high:

We have many colleges and universities in Oman, more than 50. Of course, some of these will implement the course differently and some of them have not implemented it yet. (Male policymaker from MOHE, interview in English)

This variation might cause the programme goals to not be met or the (re)creation of different goals at different institutions. This is evidenced in the varied programme implementation strategies across HEIs (Section 5.2) as a result of different understandings of the prime aims for entrepreneurship teaching. Other academic subjects are implemented differently across HEIs and have varied outcomes. What is unique about this programme is that it is a national initiative which is set to achieve specific national aims to contribute to economic diversification. Other subjects aim to

¹⁰⁷ MOHE required all 59 HEIs in Oman to offer the EEP as mandatory for all students. However, only half of these institutions have done so while the other half are still struggling to offer it so due to lack of teaching staff and financial resources. Eventually, the entire HE sector must offer the EEP as mandatory.

meet students' future career needs, which may relate to specific niches in the private or public sector labour markets.

On the other hand, implementing a unified curriculum for all HEIs was not perceived as a viable alternative either given that each discipline of study, and each HEI, has its own nature that is different from other subjects. This was emphasised by half of the managers and lecturers:

For engineering, one of the obstacles and difficulties is to teach those students who have no clue about business. Some students have difficulty to understand as the course is based on business. Also, we teach this programme in English. [Khalifa, male lecturer from Study Site Three, (business), interview in English]

For most students, EE provides a new type of knowledge which is difficult to learn, particularly for students from non-business disciplines. Including EE before university would prepare them for its further learning in higher education. An approach based around local variations in HE institutions was reported to suit most lecturers and managers (9) given that it allows some academic discretion and adaptation to each HEI's situation:

We have the freedom to put out content and material to the students which is linked to our outcomes. [Moza, female lecturer from Study Site Two, (business), interview in Arabic]

The following section discusses two broader educational aspects before discussing the EEP's design and implementation in the following sections.

7.2.4. HEI Ranking and Discipline of Study

The data indicate that HEI ranking/level shows influence on student understanding and engagement, while discipline of study shows little impact.

First, discipline of study in this thesis (business/management, ICT and engineering) seemingly has little bearing on attitudes towards entrepreneurial engagement, or understandings of it. Students across all disciplines understood entrepreneurship in similar ways, including engineering students whose major is far removed from entrepreneurship. Discipline of study did not affect whether the students interviewed for this study were more or less likely to engage in entrepreneurship. Indeed, as figure 6.6 shows, the preference was nearly always for employment on graduation (mostly public sector). Teaching staff were similarly minded on the lack of importance of subject studied for engaging in entrepreneurial activity. Thus, whilst a minority of lecturers (two from

Study Site Two and one from Study Site Three) reported that business majors should be better able to understand the concept of entrepreneurship than other students, the majority focused on seriousness and willingness (or motivation) as more important for entrepreneurial engagement than subject of study:

It is interesting to know that it is different with our students; those who are specialising in business and management, or students from other disciplines. It was interesting to teach the course, because I had medical and engineering students, as well as some from the College of Arts. The approach was different, in that some of the students realised that even though they came from different colleges, entrepreneurship was still the core of the economy. So, I had a very interesting business plan from students who took it seriously. Not that the other group did not take it seriously, but they realised that it was OK for them. They came around to the idea, even those from medical school; telling themselves that they too could be an entrepreneur. Entrepreneurship is not only for those studying economics or political science. Therefore, they were very interested in creating those business plans. [Eman, female lecturer from Study Site One (Business), interview in English]

Second, HEI level/ranking had some bearing on student attitudes towards entrepreneurship. It appeared that the understanding of entrepreneurship developed by students in high-ranking HEIs contributed to more positive attitudes to SME start-ups, at least to some extent. Highly qualified faculty, higher performing students, and better institutional infrastructure (see Chapter 4) are contributors to greater likelihood of entrepreneurial engagement. The four instances of negative attitudes towards entrepreneurship reported in the current study were expressed by students from Study Sites Two and Three (the medium and low-ranked HEIs).

As explained in Chapter 4, HEI rankings were based on certain criteria which concern overall quality of education. However, when it comes to the data, Study Site Three appears slightly higher in terms of students' understandings and engagement than Study Site Two. That is due to having more staff with entrepreneurship qualifications (see Table 7.2), inclusion of more of the MOHE guidebook objectives (see Table 7.1), and more inclusion of wider conceptions of entrepreneurship in the curriculum (see Figure 5.1). However, the difference between these two sites is insignificant as the more significant difference is between Study Sites Two and Three on the one hand and One on the other, which also confirms the significance of education quality for entrepreneurship understandings and engagement.

The data show some nuances in understandings across the three Study Sites in terms of the role of staff qualification and curriculum in shaping these understandings. For example, the only three students who confirmed their intentions for entrepreneurial activities are: two from Study Site 1, one from Study Site 3 and none from Study Site 2, despite these students also mentioning other reasons for this intention (see Chapter 8, Section 8.5.2). Furthermore, more students link entrepreneurship understandings to innovation/creativity, invention and risk-taking from Study Site 1, to some extent, from Study Site 3 and to lesser extent from Study Site 2. Finally, almost all students from Study Site 1 expressed positive attitudes towards entrepreneurship compared to around 75% of students at Study Site 3 and 70% of students in Study Site 2. Although other factors are likely to play a role in differences across the three study sites, as discussed in Chapter 8, Section 8.3.3, staff competence on designing and delivering the curriculum could be significant.

The above points to two explanations. Firstly, HEI level/ranking matters when trying to help students develop positive attitudes to entrepreneurship. The content and/or method of delivery for the EEP adopted by a low-ranked HEI is not as effective in terms of engaging positive attitudes as one used in a higher-ranking HEI. As mentioned earlier, even though the MOHE specifies the use of a unified guidebook for delivering the programme, each HEI is allowed some flexibility to design its own teaching methods and syllabus. The application of different teaching models has led these HEIs to deliver different outcomes with regard to student attitudes towards entrepreneurship.

A further explanation is that the faculty/staff in the three study sites, particularly in Sites Two and Three, not sufficiently qualified or prepared¹⁰⁸. This lack of qualifications and training was expressed by more than half of the lecturers. Below is one example:

There is lack of training. We all [staff] do not have qualification in teaching entrepreneurship. The ministry sent us this course to teach but did not provide training courses to prepare us [Humaid, male lecturer from Study Site Two (business), interview in English]

This is an issue that should be investigated further in order to help low-ranking HEIs improve their programmes. For example, exchanging experiences through collective staff workshops could reduce the gap between high-ranking and low-ranking HEIs (see Chapter 9 for Recommendations). The following section explores variations in how the

¹⁰⁸ Table (7.2) shows that staff qualifications are more relevant at Study Site One and less so at Study Site Two and Three.

curricula is delivered at different sites and the implications of this for the meeting of the programme's aim of diversifying the economy.

7.3. The EEP Policy Adaptation at institutional level

This section aims to explore variations in how the EEP policy has been adopted in the three study sites covered by this thesis and the implications of this. Four main themes evolved from the data: the nature of entrepreneurship, variation in content, balance between theory and practice, and level of adaptation to Oman's national context.

7.3.1. Nature of Entrepreneurship

Chapter 5 concluded that Omani stakeholders' understandings of entrepreneurship are aligned to similar meanings to those identified in the literature. However, Oman is distinctive, particularly from the policymaking perspective, in that it places greater emphasis on the economic aims of entrepreneurship (diversifying the economy and creating jobs) at the expense of other social and individual meanings and purposes. The following sections discuss stakeholder understandings which developed as a result of examining the programme in the Omani context.

7.3.2. Variation in Curriculum Implementation across HEIs

The MOHE EEP policy guidebook includes many possible course topics related to entrepreneurship and economic development. This is to give each HEI flexibility to focus on the content that suits it. Each HEI covered by this study designed and delivered its EEP differently (see Table 7.1) and has tailored the MOHE course guidance differently.

Table 7.1 Areas of Focus in each HEI

MOHE	Site 1	Site 2	Site 3
1- Theory	✓	✓	✓
Objectives	✓	✓	✓
Knowledge about entrepreneurship	✓	✓	✓
Knowledge about SME start-ups	✓	✓	✓
Idea generation	✓		
Knowledge about supporting entities	✓	✓	✓
Understanding the ecosystems	✓		✓
Knowledge about resources	✓	✓	
Innovation and/or creativity	✓		✓
Other entrepreneurial traits (behaviours)	✓	✓	✓
Entrepreneurship in relation to Oman's economy	✓	✓	✓
2- Practice			
Business and feasibility planning	✓	✓	✓
Starting-up a business (practical activities)	✓	✓	✓
Cooperative learning			✓
Extracurricular activities (e.g., hands-on)	✓		
Seminars	✓		
Case studies	✓		✓
Industrial trips			
3- Evaluating the Impact	✓	✓	✓
Theory	✓	✓	✓
Write-up	✓	✓	✓
Practice	✓	✓	✓
Presentation	✓	✓	
Course impact			

Source: Adapted from MOHE guidebook and curriculum syllabi from Study Sites One, Two, and Three

Table 7.1 summarises the content of the curriculum syllabi from the three study sites. All the theory topics included in the MOHE guidebook were considered at each site. However, regarding area 2, "Practice", extra-curricular activities are only included at Study Site One. In addition, the three study sites considered area 3, "Evaluating the Impact" through conducting tests, assessing students written reports, and presentations and assessing students practical businesses. However, none of the three study sites included course impact during the time of collecting data. This shows a disparity in content between institutions and the MOHE guidebook, as well as between institutions themselves. On the whole, the high-ranked HEI has included a wider array of MOHE guidebook content than the mid- and low-ranked HEIs. The nature of this adaptation of the curriculum at the institutional level corresponds with data indicating that more students hold sound understandings and positive attitudes towards entrepreneurship at Study Site One.

Differences across study sites can also be seen at the level of discipline of study. The policy intends for each department within a HEI to design a programme that suits the nature of the major, as an HE sector policymaker pointed out:

Entrepreneurship in higher education institutes should be related to the disciplines/majors that students enrol in. [Male policymaker from MOHE, interview in English]

This perception seems to be shared at Study Site One (the high-ranked HEI), where the engineering department designed its own curriculum. On the other hand, at Study Sites Two (medium ranked HEI) and Three (the low ranked HEI) a single curriculum has been designed to accommodate all subjects, which created a problem:

Two years ago, a large proportion of students failed this course because engineering students do not like to memorise information and unfortunately this is the way it was taught. [Zainab, female manager from Study Site Two (engineering), interview in English]

Indeed, this approach caused engineering students struggle to learn a business-based curriculum:

Yes, they [business students] have more information about business than us [engineering students] and they understand it more than us. We need to study and revise more to understand the business concepts. They are difficult. [Sarah, male student from Study Site Two, (engineering), interview in Arabic]

Policy adaptation occurred from one HEI to another and lead to different understandings among students in different institutions. Also, the data suggest that the standing of the HE institution shaped the development of EEP's curriculum, as well as entrepreneurship understandings and attitudes (see Chapter 5, Section 5.3).

The following section further investigates the diversity of implementation across HEIs by identifying key content in each HEI's curriculum. This discussion helps to further explore whether differences in implementation reinforce the view that the programme is unlikely to contribute to economic diversification.

7.3.3. Stakeholders' Views on Curriculum Content and Pedagogical Strategies

This section discusses stakeholder views on the EEP content by exploring the most frequently discussed part of its content (the business plan). Discussions with stakeholders also spread to encompass pedagogical aspects, in particular around the

importance of “case studies”. The data analysis reveals that the topic most frequently mentioned as key for the EEP curriculum is creating a business plan¹⁰⁹ (19 students). The following statement is illustrative:

I learned about entrepreneurship and business, how to become an entrepreneur, and what entrepreneurship is. The most important thing I learned is all aspects of a business plan from starting a business by doing a feasibility study till you get the point of starting it and running it. [Saoud, male student from Study Site Three, (business), interview in Arabic]

The business plan is listed as one key topic in the MOHE guidebook’s learning objectives (Oman Ministry of Higher Education 2015, p. 9), and many studies indicate that it is the most common topic in EE programmes in the US (Bewayo 2015), which is consistent with the above finding for Oman. Like in the case of students, more than half of the lecturers and managers agreed that the business plan is a key topic:

We teach them how to think to start a business and how to put it in a business plan [...] And the business which include objectives, goals, financial commitments, and the funding available from where, and how to make budgeting, how to make the break even, all these calculations are included in the practices. [Sultan, male manager and lecturer from Study Site One (business), interview in English]

In terms of pedagogy, the most popular pedagogical strategy amongst managers and lecturers – mentioned by more than half of the interviewees in these categories – is using case studies¹¹⁰. This lecturer explains why this proves useful in teaching entrepreneurship:

As I said entrepreneurial mind-set was the main thing at the beginning to sensitise them, and what it takes to be an entrepreneur, but then this case study which we went through after the entrepreneurial mind-set, the characteristics of an entrepreneur. [...] This case study summarises all the skills, the characteristics for students. [Eman, female lecturer from Study Site One (business), interview in English]

Case studies are a key feature of entrepreneurship education programmes (Iahad et al. 2013, p. 2202). However, half of the faculty/staff participants did not recognise this key method, which can be related to the lack of appropriately qualified teaching staff in this

¹⁰⁹ There are different forms of business plans. One of the most common includes a cover sheet, a table of contents, an executive summary, an organisational plan, a marketing plan, and a financial plan (Pinson 2008).

¹¹⁰ The case study method presents cases which pose problems and has students solve them. It helps students to develop their problem-solving and analytic skills (Arasti et al. 2012).

area. They emphasised that their teaching practice was based on knowledge transmission through lecturing, and employed quizzes and exams based on textbooks for their assessments. Neither students nor lecturers mentioned other approaches to teaching, such as simulations, incubators, role play and internships given these are important EE teaching methods (Sirelkhatim and Gangi 2015).

Most staff did, in fact, not have qualifications relevant to the teaching of entrepreneurship. Table 7.2 below illustrates the educational degrees held by interviewed managers and lecturers:

Table 7.2 HE Manager and Lecturer Qualifications across Study Sites

Institution	Manager	Lecturer
Study Site One	<ul style="list-style-type: none"> • PhD, Management • PhD, Entrepreneurial Engineering 	<ul style="list-style-type: none"> • PhD, Entrepreneurship • PhD, Industrial Engineering
Study Site Two	<ul style="list-style-type: none"> • PhD in Entrepreneurship • PhD in ICT 	<ul style="list-style-type: none"> • PhD in Marketing and Management
Study Site Three	<ul style="list-style-type: none"> • PhD in Information Management 	<ul style="list-style-type: none"> • PhD in Management • MA in Accounting
Study Site Two		<ul style="list-style-type: none"> • PhD in Management
Study Site Five	<ul style="list-style-type: none"> • PhD in Management 	
Study Site Six	<ul style="list-style-type: none"> • PhD in Engineering 	
Total participants		14

Source: Interview data

Two lecturers at Study Site One (the highest ranked), one at Study Site Two, and none from Study Site Three have PhDs in entrepreneurship. This mismatch in staff qualifications was confirmed by students:

Interviewer: Do you think that the EEP is capable of changing students' intentions?

Student: I think not. This is because the lecturer who taught us did not understand entrepreneurship and was not very informed about SMEs. These lecturers were not specialised in entrepreneurship and they are teaching accounting and other subjects. Also, the lecturers should be given training in how to teach entrepreneurship. The content was superficial and shallow. This is not my

opinion: most students think the same. [Hamad, male student from Study Site Two (business), interview in Arabic]

While most students at Study Site Three (the lower ranked) held this opinion, none from Study Site One (high-ranked) held a similar view. Therefore, HEI standing was correlated with the quality of EEP's implementation.

Elsewhere, Martin et al. (2013, p. 220), found that university entrepreneurship courses are generally designed "to introduce students to the subject of entrepreneurship for the first time". Because these courses usually attract a small number of students, only a small proportion of them are likely to develop the knowledge and skills needed to become entrepreneurs. The above authors compared this to the outcomes of more professional entrepreneurial courses accompanied by real-life experience designed by companies for their own staff and found that those led to better outcomes in terms of skills and competencies. Although this study did not examine such professional courses, they likely have greater impact than an academic course. For example, two other students had gained first-hand experience of entrepreneurship through participation in competitions:

I have two years of experience through my participation in INJAZ OMAN¹¹¹. In the first year, we practiced launching a start-up. Of course, it was a small company, but it was not official. In the second year, I had my real start-up company with a partner [...]. The competitions that were conducted by NAMA and INJAZ Oman motivated us to practice and increased our interest in entrepreneurship. INJAZ Oman even gave us a space to work on our project and provided us with a lot of technical support. [Hala, female student from Study Site One (Business), interview in English]

The following section discusses the implication of the theoretical and practical parts of the EEP.

7.3.4. Balance between Theory and Practice

Another key aspect which has influenced the programme's implementation is a lack of balance between theory and practice. Despite efforts to achieve this balance in the policy documents (see Table 7.1), most interviewed students affirmed that practical aspects are given less significance than theoretical ones in the programme. Although two HE managers and three lecturers claimed that the curriculum included adequate practical

¹¹¹ INJAZ Oman is a branch of 'Junior Achievement Worldwide'. It runs programmes aimed at developing skills like innovation and leadership. Participating students may use these skills in future business ventures.

aspects, more than half of students (20) disagreed. This perception comes from students in both high- and low- ranked HEIs. This quote is from one of the latter:

I feel that the course needs to have a practical part instead of just theories and explanation. I feel that the student is required to apply them immediately, especially the feasibility study. We could, for example, under supervision or during the last two days, make a presentation during the course. I feel that the student should be engaged through practice [Raya, male student from Study Site Three (medicine), interview in Arabic]

This aligns with a previous study by (Wu and Wu 2017) in the Asia-Pacific region that found that most teaching methods used for delivering entrepreneurship in that part of the world follow the traditional theory-based model. This is not the case in highly-developed countries in Europe or in the USA (Rasmussen and Sørheim 2006), where contemporary EE has become more action-based, i.e., learning-by-doing or team entrepreneurship. Wu and Wu (2017, p. 1314) attributed this difference between countries to a range of differences “in relation to business environment, human capital, and cultural factor issues”. Oman seems to be closer to the Asian Model (see also Section 2.7.3). That is, the entrepreneurial programme is more theory-based, according to student perspectives, even though it is supposed to provide a balance between theory and practice (see Table 3.5).

Most entrepreneurs emphasised the importance of the practical aspects:

I don't like entrepreneurship being a “curriculum”; I would prefer it to be a practical activity. At first, I thought it was better to introduce it as a subject but after I had training in entrepreneurship, I know introducing it in the form of an activity would be much better. [Female entrepreneur, (education), interview in Arabic]

This is in line with the discussion provided in Chapter 6 on the importance of practice, e.g., work experience, hands-on activities, and participation in events/competitions (see also Section 2.7.3). This also agrees with Piperopoulos and Dimov (2015) who explored students' entrepreneurial intentions which were developed by an HE entrepreneurship course and found that practical-oriented course leads to higher intentions whereas theoretical-oriented course leads to lower intentions. This further adds to the argument that the programme has limited potential to achieve economic aims.

7.3.5. Policy Borrowing and Adaptation to Oman's National Context

Another key issue which emerged from the data is that policy or curriculum borrowing have influenced the programme's ability to achieve the intended economic diversification. This policymaker explains why policy borrowing took place:

We believe it is an international trend, not only in Oman. There are now even entrepreneurial universities in countries like Finland and Malaysia, so the student starts thinking of his/her own enterprise from the first day he/she starts school. [Male policymaker from MOHE, interview in English]

There has also been extensive curriculum borrowing, as noted by HEI staff. Half of lecturers interviewed stated that they are using foreign curriculum without much adaptation to the Omani context. Twelve students reported objections to using foreign materials. First, they argued that these materials have different purposes and content which do not fit Oman's circumstances:

The curriculum used in that programme was brought from the US. It better suits people who live there and not Oman. [Aseel, female student from Study Site One, (business), interview in Arabic]

The purpose of EE in the UK, Singapore or the USA is not transforming the economy away from reliance on oil but rather developing individual entrepreneurial attributes and competencies, with a particular focus on innovation. This is expected to help students have successful careers and in add economic, social, and cultural value to the nation (The UK National Centre for Entrepreneurship Education 2018). In line with this, students argued that if foreign curricula are borrowed, they must be adapted to suit the Omani context:

As I mentioned before the course curriculum is American. If we had a similar course in Oman it should be in a better form and more suitable for Omani student, because all the statistics that are in the book are American, and we don't want to learn about America, we need to learn about our country. Now we have many institutions that are interested in this field so why not create a special curriculum in this field? [Ahmed, male student from Study Site One (business), interview in Arabic]

Many studies have highlighted difficulties in educational policy or curriculum borrowing (see Chapter 2). As discussed in Section 3.3.4, "best practices" in one context do not necessarily translate into good practices in another context due to political economic and cultural differences (Steiner-Khamsi 2014, p. 153). Similarly, in this current study

students had a negative view of the use of foreign content and expressed the need for adaptation to suit the Omani environment, for example including case studies from Oman, as some student interviewees suggested.

On the other hand, lecturers and managers affirmed that they adapted foreign curricula to fit Oman's context and goals:

Yes, sometimes we adapt some of the materials which are not applicable to Oman. We start to adjust some Omani context in it. So, it is flexible when it comes to the course, but we are not flexible when it comes to the whole curriculum. [Tameem, male manager and lecturer from Study Site One (engineering), interview in English]

Some study sites indeed attempted some sort of adaptation to Oman's environment but this was limited and not effective according to students. For example, at Study Site Three, Western materials such as a textbook entitled *Entrepreneurship*, by David A. Kerby, which encompasses eight chapters focusing on issues like the role of entrepreneurship in the economy and society globally and in Oman, the entrepreneur's characteristics and behaviour, and finally new venture planning and creation are used. A PhD thesis by William Wresch on "Starting a Business in Oman", is also used. Study Site Two's curriculum addresses gender equality in entrepreneurship by devoting a section to business opportunities for Omani women. However, adaptation attempts remained limited beyond such practices.

7.4. Entrepreneurial Skills Development

This section examines the programme's ability to develop entrepreneurial skills that make it more likely that graduates will decide to start a business instead of looking for salaried employment, a key objective of this programme. Clearly, the evidence from Chapter 6 indicates that the programme is not changing such intentions, but the focus here is on skills development and the delivery of skills for entrepreneurial activity. To some extent the investment in (entrepreneurial) skills, when the evidence suggests that student intentions remain stubborn and unchanged, evidences the futility of policies based singularly on human capital imperatives. However, skill formation will have a part to play if Oman is to realise its broader ambitions – this section comments on the particular aspect of entrepreneurial skills development.

7.4.1. Key Entrepreneurial Skills in Oman's HE Sector

Echoing the previous findings regarding inconsistencies in policy adaptation and drawbacks in implementation, there are number of issues with the programme's ability

to develop entrepreneurial skills¹¹². Table 7.3 below provides a review of a MOHE policy document and the three study sites' curricula offerings, focussing on entrepreneurial skills. The table covers five key skills identified by the literature (e.g., Henry et al. 2005; European Commission 2015a; Kuratko 2016) as crucial for successful entrepreneurs and which can be taught through entrepreneurship education (see also Chapter 2). The purpose is to compare these with the skills mentioned in the curriculum documents (and prioritised by MOHE and study sites) and those that students mentioned and felt they gained during the interviews undertaken for this thesis. This comparison helps to assess the delivery of the EEP, by looking at whether students associate with entrepreneurship skills which are stated in the MOHE's EEP curriculum.

Table 7.3 Key Entrepreneurial Skills¹¹³: Inclusion in MOHE's Policy Documents and Curricula in the Three Study Sites

	Planning a business	Managing a business	Innovation and/or creativity	Risk-taking	Communication
MOHE	YES	YES	YES	YES	YES
Study Site One	YES	YES	YES	YES	YES
Study Site Two	YES	YES	No	YES	NO
Study Site Three	YES	YES	NO	NO	YES

Source: MOHE guidebook and the three Study Sites' curricula

These skills are indeed included in the documents (MOHE guidebook, Study Site One, Study Site Two and Study Site Three's programme curricula), and all students across the three study sites stated that the programme had the ability to develop some of these skills. The following skills are ordered based on the number of interviewed students who affirmed having developed them through taking the EEP. A word of caution is that these data is based on student self-reporting, so their actual acquisition cannot be confirmed.

First, planning was mentioned by 19 students from both engineering and business across the three study sites. This is the skill most students said they gained. As this student explains:

¹¹² Some of these skills presented as entrepreneurial characteristics in Chapter 5 were recognised by this study's participants, which indicates the EEP has the potential to create awareness and understandings of these traits.

¹¹³ The five key skills in the table were taken from European Council (2006, p. 1) and Henry et al. (2005); Kuratko (2016).

The best thing I benefited from was business plan. [...] It is important to think thoughtfully about the idea and make a business plan. And then look for funders. [Anwer, male student from Study Site One, (business), interview in Arabic]

The second skill, most often mentioned by (11) students, is communication:

You need to have the ability to communicate and create a wide network to market your business. Second, how to identify your customers before even start your business and how can you reach these customers and satisfy them with their products. [Maher, male student from Study Site One (engineering), interview in Arabic]

The third key skill highlighted by (9) students is marketing:

Generally speaking, the course teaches some skills, like how to make a business plan, how to observe the market, and [...] from the marketing perspective how to market the project, identify the competitors and how to compete with them. [Dalal, female student from Study Site Three (business), interview in Arabic]

Teamwork is another skill students frequently reported to have gained (7 students):

Interviewer: OK, so through the course, what entrepreneurial skills does the course work to engender?

Student: Many skills like creating a team and managing and working with a group, innovation, trust, independence, and many others. (Khalid, male student from Study Site Two (engineering), interview in Arabic]

Other skills were mentioned by six or fewer students. These were financial skills (6 students), management skills (5 students), critical thinking (5 students), problem solving (4 students), and risk taking (2 students). Management and risk-taking are also key skills identified in the literature and stated in curriculum documents as Table 7.3 shows.

The fact that only two students said that risk-taking was a skill or trait they gained is in tune with the finding of Oman being high in uncertainty avoidance and low in individualism (Chapter 6). As mentioned in Chapter 2, this cultural feature is not unique to Oman, as people in the other five gulf renter state countries tend to also avoid careers that involve risk-taking (Hanieh 2015; Ennis 2015), such as entrepreneurship.

Finally, a few students indicated that other non-educational experiences can help them gain more entrepreneurship related skills than in the EEP programme. Below is an example:

It is not about education. Being an educated person does not mean you will be a successful entrepreneur. There are people who hardly studied but are very entrepreneurial and successful. We can gain skills and knowledge not through a degree but through reading books and learning from the market. [Omima, female student from Study Site Three (medicine), interview in Arabic]

This is also evidenced in the intentions of some students to get jobs before starting a business to acquire experience:

The job will give me knowledge and experience. In addition, it will give me financial support to start a business. [Maysa, female student from Study Site One (Business), interview in English]

The majority of HE lecturers and managers, except Study Site Two as shown in Figure 7.1, referred to innovation (or creativity) and risk-taking as the top two entrepreneurial skills taught in the EEP. This is one example:

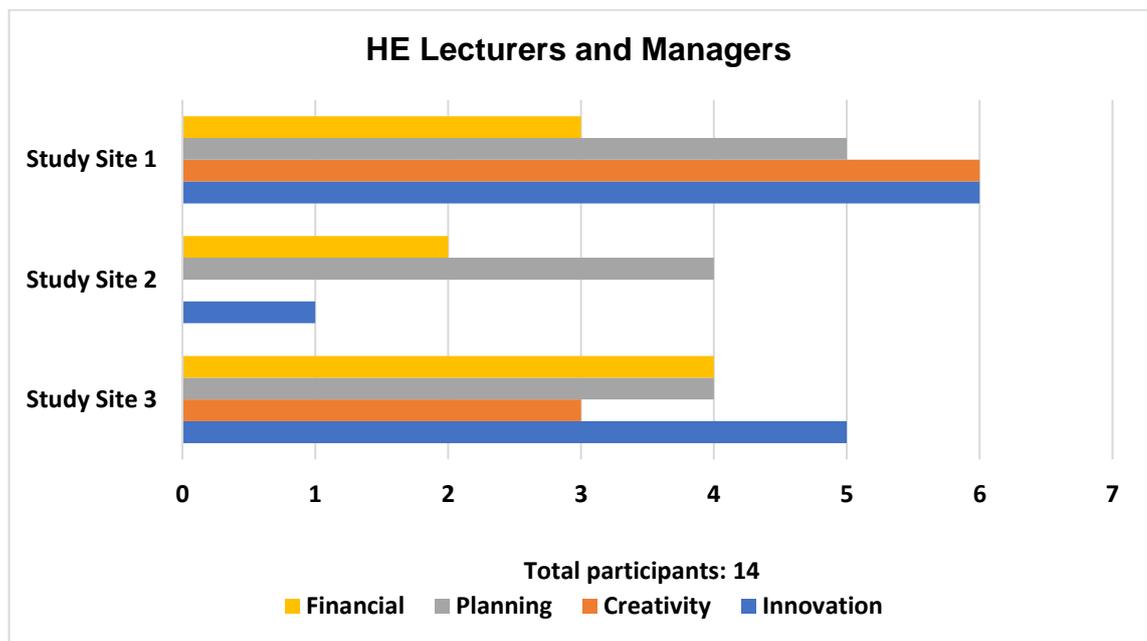
The most two important are creativity and innovation. We try to make them think differently. [...] We give lot of innovative examples: Alibaba, Facebook, and Google. The common thing on these they did not use a lot of investment not a lot of money to start a business. [Faisal, male lecturer from Study Site Three, (Business), interview in English]

And this manager prioritised risk-taking:

First of all, risk taking is the most important skill, if you cannot take risk you can never be an entrepreneur. The second most important aspect is innovation, if you do not have innovative capabilities then you will fail. [Mansoor, male lecturer from additional Site C, (Business), interview in English]

The fact that teaching staff pointed out these as two crucial skills, which differentiate entrepreneurship from business (as mentioned in Chapter 5), indicates their sound understanding of the importance of these skills. Yet, there are notable differences between institutions. Staff in Study Site 2 reported less frequently that the EEP develops creativity and innovation skills than staff in other Sites.

Figure 7.1 Top Entrepreneurial Skills developed by the EEP according to interviewed HE Lecturers and Managers



Source: Interview data

Again, this supports the assumption that many HEIs are not yet ready to introduce EE due to a lack of relevant curriculum content and staff training, particularly at lower-ranked HEIs.

7.4.2. Mismatch in the Skills Considered by Entrepreneurs and Students

For this study, it is important to compare students' perspectives on the skills most often developed by the programme with those of the people with first-hand experience: entrepreneurs. This helps to assess if the skills delivered by the programme reflect the skills considered needed in the Oman context according to those who have been experiencing this context. The following skills are ordered based on the number of entrepreneurs who reported them as being most important.

The majority of skills cited most often by students do not match what entrepreneurs mentioned. In this study, 5 entrepreneurs stated that financial skills were both top skills:

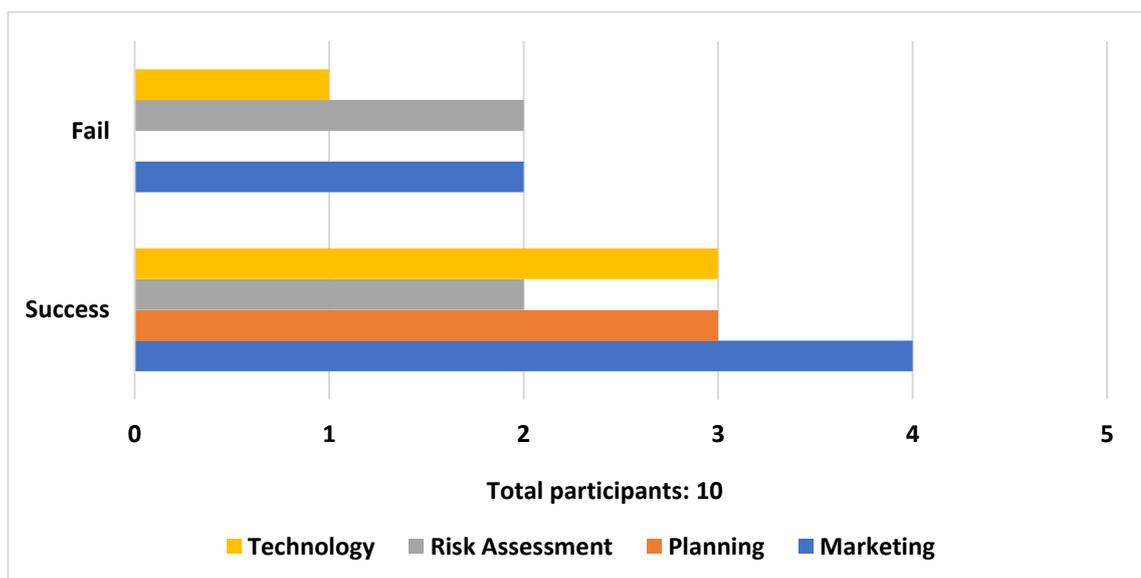
*Frankly from my point of view, I think managing finance is the most crucial skill of all, because running a business is all about how you manage your money.
[Successful male entrepreneur, (design), interview in Arabic]*

Also, half of the ten entrepreneurs stated that marketing is a top skill for entrepreneurship arguing, for example:

We must focus on skills related to dealing with customers such as negotiation and marketing, we lack these two here in Oman. [Successful male entrepreneur, (Architecture and Design), interview in Arabic]

Marketing skills, which this entrepreneur said is lacking, is also mentioned in the policy and curricula documents. Other skills identified by the entrepreneurs but not the students are risk assessment, technological skills, the ability to face challenges, handling official procedures, and human resource management. These skills are mostly absent from the policy and curricula documents.

Figure 7.2 Key Entrepreneurial Skills according to interviewed Successful and Failed Entrepreneurs



Source: Interview data

Figure 7.2 above illustrates the top entrepreneurial skills and compares the answers given by successful and failed entrepreneurs. For the former, planning and marketing are critical skills which unsuccessful entrepreneurs failed to recognise. This quote gives an example of shutting a business down:

Interviewer: Why do you think your business did not survive?

Entrepreneur: Among different reasons, I came to an awareness that not any idea that comes to mind shall not be executed immediately. It needs proper planning and studying, and the best approach is that if you want to make an idea happen, you have to analyse it carefully. [Fail female entrepreneur (food service and café), interview in English]

For this entrepreneur, rushing to start a business without proper planning led to failing. This indicates the importance of these two skills for entrepreneurial start-ups in Oman's market context.

The types of skills which entrepreneurs identified is based on the experience which they gained from the labour market:

I think when you actually run a business in the market, you realise what things you need. It is different from reading that in a book or school. This allows you to see the risks and what skills you need to deal with them. [Successful male entrepreneur, (Architecture and Design), interview in Arabic]

The above entrepreneur explains that skills gained from real experience in the labour market are different from skills that can be learned from academic material. However, that does not mean that skills learned in academic setting are of no value. The issue is that the type of skills which suit a particular context, should be identified based on that context's needs of where these skills are delivered. As discussed in Section 7.3.5, the main issue with Oman's EEP, is that there is extensive curriculum borrowing which does not reflect Oman's needs, e.g., key skills for Oman labour market.

7.5. EEP ability to address Contextual Limitations

After discussing limitations in the EEP's ability to develop entrepreneurial skills, to some extent, and intentions for entrepreneurial activities, to a larger extent, this section discusses the likelihood of the EEP to overcome political, economic, cultural, and social barriers to entrepreneurship in Oman (as identified in Chapter 6 it has not done so to date). The chapter argues that the EEP's limited ability to develop the required skills for and engagement with entrepreneurship limits the likelihood that it will, on its own, overcome contextual barriers to entrepreneurship.

First, regarding the understanding of entrepreneurship, the EEP has been creating a dominant economic understanding of entrepreneurship, as the policy intended. The EEP has also shown potential for expanding the understandings of entrepreneurship to non-economic meanings. This is evident as students identified social meanings of entrepreneurship due to their inclusion in two of the study sites' curricula (see Chapter 5). However, as Chapter 6 begins to indicate, the EEP's success has been limited in its ability to encourage more students to become entrepreneurs, which is an urgent aim for the programme according to government.

Hence, second, the EEP appears weak in its ability to overcome cultural and social barriers to entrepreneurship. As discussed in Chapter 6, most students seem unready to accept such a shift in mindset due to the culture of getting a salaried job post-graduation and the impact of family members and friends, who are mostly not entrepreneurs, on their career intentions. As discussed in this chapter, the fact that the EEP is a new programme is an important reason for its failure in this respect, as it is

difficult to break a culture created over the course of the last 4 decades in a short period of time. The EEP, moreover, has not done much to help adapt the curriculum to suit Oman's culture, as discussed in Section 7.3.6. Finally, even for countries with a long experience of implementing entrepreneurship in their education systems (e.g., US), the number of graduates with true entrepreneurial intentions is relatively small due to the low impact of academic courses in the stimulation of entrepreneurial behaviours (Martin et al. 2013). Ambitions for the EEP are thus, as with similar programmes elsewhere, unlikely to be realised – unless part of a more joined strategy (see Chapters 8 and 9).

7.6. Conclusion

The evidence in this chapter (along with that in Chapter 6) suggests that at present Oman's EEP has limited potential to contribute to economic diversification through changing mindsets and developing entrepreneurial skills. Data attribute this to issues related to policy, curriculum implementation, and skills development, as well as external factors.

First, despite some strengths, the current approach of Oman's programme (a central policy which enforces mandatory implementation in all HEIs) appears to restrain its ability to direct students into entrepreneurial activities post-graduation. As the data show, the students felt obliged to take the EEP and focused on passing the course instead of benefiting from its content and skills. Issues related to the absence of EE before university, and disparities in implementing the programme in low-, mid- and high-ranked HEIs, such as existing inconsistencies in curriculum adaptation and lack of balance in the weight given to theory and practice in the programme. These disparities across the study sites are due to differences in staff qualifications and institutional infrastructures.

The EEP has developed knowledge of a range of skills related to entrepreneurship, but has not led to their acquisition by students. Moreover, students are still reluctant to pursue entrepreneurial career pathways. There are, also, differences between the four groups of participants in their prioritisation of entrepreneurial skills (see above Figures 7.3 and 7.4). Whilst lecturers and managers seem more aware of the value of innovation, creativity and risk-taking, this is not always the same among students. Some of the skills that students considered important for entrepreneurship are generic. The difference between HE stakeholders (students and faculty/staff) and entrepreneurs in prioritising entrepreneurial skills reflects differences in the experiences (and priorities) of each, as discussed.

Finally, this chapter explains the likelihood of the EEP to tackle the limitations of contextual factors. If wider societal and cultural factors are not tackled, the EEP will

struggle to increase the supply of skilled entrepreneurs who can actively participate in economic diversification and Omanisation through the HE sector. Clearly, the EEP cannot do much to achieve this goal alone, but there is also a need to examine how it is implemented and could be improved (as discussed in Chapter 9). For example, the EEP can contribute to the creation of an entrepreneurial culture by doing more in terms of trying to develop risk-taking behaviour among students to break the culture of risk-aversion presently characterising Oman's society. However, there are political considerations at stake here i.e. if individual start taking more risks, they may become more independent and individualistic, threatening the government's authoritarian character.

In addition, there are factors independent of the EEP affecting its success and which require further policy actions. For example, the EEP cannot strengthen the private sector because the latter needs an industrial strategy. Other supporting measures in line with the OECD/EUROSTAT entrepreneurship framework, e.g., regulations, R&D and technology, culture, access to finance (see more in Figure 2.1 in Chapter 2) are complementary and supplementary factors for the success of entrepreneurship and EE. The following chapter discusses factors impacting on the EEP's aim of diversifying the economy.

8. Chapter Eight: Contextual Specificities, Entrepreneurship Education, and Economic Diversification

8.1. Introduction

Based on an analysis of the survey results and themes emerging from the qualitative data (Chapters 5-7), this chapter discusses in more depth the central findings of the thesis which address the research questions (Chapter 1) and arguments on how and why:

- i) Stakeholders' understandings of entrepreneurship, in Oman and a rentier state context, are mostly 'conventional' i.e. in line with understandings held elsewhere;
- ii) HE students in Oman remain unlikely to engage in entrepreneurial activities post-graduation;
- iii) The political-economy of Oman's rentier state and its social and cultural specificities provide a poor environment for entrepreneurs and discourage engagement in entrepreneurial activities, and;
- i) The capacity of Oman's EEP to develop entrepreneurial skills and its overall potential to direct HE students towards entrepreneurship to contribute to diversifying a rentier state economy is limited.

In addressing these key aspects, this chapter reflects on its contribution to the extant literature on entrepreneurship education and, in particular, the extent to which investment in the latter has the potential to meet government policy aims for diversifying a national economy.

This chapter is arranged as follows. It first discusses Oman's EEP in the context of education and skills policy and HCT as a guiding theory for policy (Section 8.2). The specific contribution is a discussion of EE programmes in rentier states, and those states intending to create entrepreneurs as human capital assets for economic diversification. The chapter then discusses understandings of and engagement in entrepreneurialism in Oman and provides context for a critical discussion of the EEP (Section 8.3). Next, the chapter discusses the merits and shortcomings of the EEP's implementation (Section 8.4), referring to a range of social and cultural factors. This adds a contribution at the level of both policy and practice by drilling down on the EEP's development and the implications of its implementation across the three study sites, as well as its roll-out across HEIs in Oman.

8.2. Entrepreneurialism Understandings in Rentier States

As discussed in Chapter 5, which addresses research objective 1 and sub-questions 1 and 2, understandings among students in the study sites researched are almost conventional to elsewhere, defining entrepreneurship as starting an innovative business and requiring of risk-taking (see Chapter 5). However, HE students and faculty/staff appeared unaware of broader entrepreneurial forms such as public and political entrepreneurship – or, the association, is weak. Policymakers, on the other hand prioritise economic aspects, at the expense of broader understandings of entrepreneurship determinants and indicators (see, for example, the OECD/EUROSTAT framework in Chapter 2). Despite policymakers' focus on SME start-ups to expand the private sector, create jobs for Omanis and diversify the economy, arguably, the data show that they are not aware of such frameworks, or what they aim to capture, as important to the development of entrepreneurship and entrepreneurship education for economic growth (Ahmad and Hoffmann 2008).

The lack of inclusion of broader meanings across all study groups does not help Oman's desire to diversify the economy. Much research, e.g., Sanyang and Huang (2010); Drucker (2014); Kuratko (2016); Dees (2017), emphasised the importance of wider meanings to inform a comprehensive, well-rounded and sound understanding of entrepreneurialism which can help contribute to the development of skills and economic diversification. This study attributes the linearity of understandings to the way policy is articulated and broader acceptance of, and sympathy with, the government's intentions for the economy which is perhaps unsurprising in what is quite an authoritarian and paternalistic state.

Oman's rush to deliver its economic aims (for economic diversification) seems, however, to be counterproductive. The current (narrow) policy emphasis ignores the wider benefits of a more all-encompassing policy perspective on entrepreneurialism, and where a range of (social and public) benefits might be realised, which might also have economic benefits. As discussed in Chapter 6, developing social entrepreneurship leads to wider societal development, which also has the potential to improve the economy. Indeed, public entrepreneurship is important for developing innovative skills in public sector jobs and thus contribute to the country's economic performance (Windrum 2008). Again, it would seem that policymakers' priorities (in policy discourse) and focus is undermining its wider goals, and fits with evidence identifying rushed and unplanned policies as a feature of rentier states' contexts (Beblawi and Luciani 2015).

This carries over to the delivery of government policy. For example, HE curriculum designers at the institutional level seem to overlook the significance of the range of

meanings and thus omit them in curricula. A complicating factor is that entrepreneurship, as policy prescriptions indicate it should be delivered by EE, is a new phenomenon within the context of Oman, as is the implementation of the EEP. The issue is that HE managers and lecturers (who are mostly not qualified or trained for EE) currently lack the appropriate expertise and knowledge base and have very limited experience of entrepreneurship. One of the consequences is extensive curriculum borrowing from countries, but the data indicate limited content adaptation, which has had negative implications for students' experience of the programme (see Chapter 7).

A final point here is that students and faculty/staff appeared to be a little more aware or more interested in entrepreneurship's broader meanings – such as those related to social entrepreneurship – which were absent from policymakers' views. This signals a slight move away from accepting and sympathising with policymakers' restricted economic aims, illustrating a common feature of rentier states, the political top-down structure (Beblawi and Luciani 2015). Subsequently, to varying degrees faculty/staff went beyond policy prescribed economic meanings and included social entrepreneurship in the study sites' curricula (see Figure 5.1 in Chapter 5). What is indicated is a bottom-up approach that might have wider benefits – in countries topping the list of Global entrepreneurship index (e.g. USA, UK, Germany) wider interpretations of entrepreneurship (within entrepreneurship programmes) are present (Assmo and Wihlborg 2016; Johnston and Fenwick 2018) and, thus, faculty/staff might – if given license – realise benefits sooner than narrowly defined policy prescriptions (see Chapter 6).

8.3. Education Policy in a Rentier State

This section addresses study objective 2 and sub-question 3. The study contributes to understanding education and skill formation policies within the context of a rentier state planning for economic diversification. As discussed in Chapter 2, Section 2.6.1, previous studies, e.g., Xheneti (2017); Secundo et al. (2017); Hahn et al. (2017) argued not only policy learning outcomes but also institutional perspectives influence the government formulation of EE policies. Oman's policy for economic diversification is informed by HCT and has its foundations in the desire to expand the supply of graduates available for private sector employment, with a particular focus on entrepreneurship and SMEs by means of direct investment in the EEP.

Previous studies such as Galloway et al. (2005); Matlay et al. (2013) claimed that implementing an entrepreneurship education policy can supply the markets with entrepreneurial skills and intentions and thereby can lead to economic growth. However, this study argues that there are two key considerations must be examined to prove such claims, in other words, to measure EE policy's effectiveness in contributing to economic

diversification in rentier state context. The first one involves examining contextual framing factors of a skill formation system where EE policy is implemented i.e. the political economy (Section 8.4) and social and cultural specificities (Section 8.3.3). The second one is the way that policy is implemented, i.e., the amount of State or/and institutional investment and the appropriate approach of programme delivery for a particular context (Section 8.5).

The following section starts with a discussion of HCT as applied within the context of Oman's political economy.

8.3.1. Oman's HE Expansion and Human Capital Imperatives

This section provides a critical analysis of a specific education policy (i.e. the EEP). At the centre of this analysis is the relation between HCT, which over the past four decades has become *the* theoretical reference for educational policies globally (Keeley 2007; Marginson 2018), and has directly informed economic diversification in Oman. The first key point of note is that Oman's ambitious nationwide plan for expansion of the HE sector and the EEP specifically, as a skills formation strategy, along with other interventions¹¹⁴, has exposed the limitations of human capital policy imperatives, as in other contexts (e.g., Wolf 2004; Stevens 2005).

This study introduces a new case study of the application of simplistic notions of human capital investment in the particular context of an economy that is heavily reliant on natural resources. Oman seems to have fallen into the same trap as many developed and developing economies when attempting to transition and spur economic growth and social cohesion through skill development alone. Several studies examine the gap between skill policies, informed by HCT, and the contexts where these policies have been implemented. For example, Allais (2012) argued that skills policy in South Africa had failed due to contextual issues such as employment insecurity, and inequality in education and employment. Similar challenges were identified in Ghana, such as lack of sustainability in skills financing mechanisms, access equity, expansion of education opportunities at the expense of quality, lack of lifelong education, and finally lack of an enabling environment for skills development and use (Palmer 2009).

Oman's model of supplying the labour market with more graduates through an expansion of the HE sector to strengthen the private sector, push the 'Omanisation' process, and diversify the economy is flawed (Al-Lamki 2005; Al-Barwani et al. 2009). Such policy is

¹¹⁴ None of the initiatives attempted since 2011 to address the unemployment problem and diversify the economy (see Chapter Two) have seemed to fundamentally alter the economic situation.

not unique, having been implemented elsewhere and promoted extensively by the World Bank and OECD, among others e.g. Green and Henseke (2016). However, as with other countries following this policy, Oman's expansion has not reduced unemployment and has accentuated skills mismatches (Belwal et al. 2017)¹¹⁵. This has created a difficult situation in Oman, resulting in more pressure on the government to find employment for its citizens, e.g., leading to the 2011 strike¹¹⁶ (see Chapter 3). Despite the fact that the HE expansion policy has raised the education level of the population¹¹⁷, it has made only a small contribution to Oman's economic diversification plan (Al-Barwani et al. 2009) and deepened the frustrations of young people, particularly given the high unemployment rate (49% as of 2017) for people between the ages of 18 to 30 (The World Bank 2018) (see Chapter 3, Section 3.3.2).

Given the above, this thesis went beyond examinations of the importance of increasing education levels for economic development and expanding the supply of educated labour in general ways and focussed instead on a programme that aims to intervene on the type of education students receive (i.e., the EEP). Studies on the merits of human capital investment that examine increasing levels of education more generally focus less often on specific subjects (e.g. STEM) (see for example, Becker 1993; Rauch et al. 2005). The lack of studies is particularly pronounced in the case of entrepreneurship education in rentier state contexts. The focus of the literature has been on the examination of investing in formal education to develop human capital, as well as the labour market returns to different levels of education or training achieved (Gillies 2017). By contrast, this thesis provides a contribution in line with those studies that place emphasis on the importance of a 'subject', e.g., Xie et al. 2015; Ro et al. 2018; Wright and Ellis 2018 on STEM subjects.

Oman's introduction of the EEP was seen as a way to create a more directed "supply-push", similar to the way STEM subjects have benefited from preferential funding regimes in some countries (e.g. UK), based on the assumption that HE students with the 'right skills' would create demand and expand the private sector (Payne 2012). The EEP has been delivered to almost half of the Oman's undergraduate student population, and is expected to supply the labour market with Omani entrepreneurs who will cultivate SME

¹¹⁵ Indeed, elsewhere in the world, skills mismatch more generally and in relation to HE expansion specifically, has created problems. See, for example, Buchanan's (2006) examination of the Australian skills ecosystem strategy; Holmes and Mayhew (2015) on where the expansion of HE has led in the UK and Chia (2017) on skills mismatch in Singapore. Skills mismatch can impact any context or system as much as it is impacting Oman's efforts to diversify its economy through creating highly skilled human capital.

¹¹⁶ Thousands of Omanis demonstrated demanding number of reforms, including increasing HE graduate employment (Worrall 2012).

¹¹⁷ Upgrading the HE student population's skills through increasing free enrolment to HEIs.

start-ups (Oman Ministry of Higher Education 2015). Although this remains a supply-side policy, it suggests some awareness that unguided human capital expansion has limitations. In addition, the hope is that this new policy will reduce foreign labour domination and the culture of over-reliance on the State for employment and thereby create more jobs for Omanis in the private sector (see five-year plans, and Visions 2020 and 2040 in Chapter 3).

When it comes to the thinking behind the EEP's goal of supplying the Omani market with entrepreneurs, it is too early to assess if this policy is inherently flawed because the EEP has been introduced relatively recently, in 2014. At a more general level, failures of the supply-push approach are evident elsewhere (e.g. the UK, and Australia), which has led some governments to change policy directions. For example, the UK government and other OECD countries have rowed back such policies (of unguided investment) to follow different models in an attempt to balance supply and demand in their skills policies, e.g. a focus on demand and skill utilisation (Keep 2016)¹¹⁸.

There is, however, some evidence that studying particular subjects may result in greater national and (individual) benefits. Atkinson and Mayo (2010) argued that tertiary STEM graduates have high living standards and good jobs and those STEM skills have helped make the US the world's leader in developing an innovative economy. Wright and Ellis (2018) found, for example, when examining the migration tendency in the USA, that immigrants holding STEM degrees move further in their career pathways and gain higher individual financial returns than those holding other degrees.

Raposo and Do Paço (2011, p. 455) argued that entrepreneurship education, as a subject, creates new good jobs "regardless of economic circumstances", but "economic circumstances" vary from one context to another, i.e., they are different in Spain, where the research of Raposo and Do Paço was conducted, compared to Oman, which wants to urgently create jobs in the private sector – particularly when oil prices mean that the government will struggle to continue to offer public sector employment to the current level. Certainly, it is not clear that this new EEP initiative will bring about this outcome envisioned for Oman. The following section specifically discusses the connection between the EEP and diversifying the economy in Oman.

8.3.2. Oman's EEP and Economic Diversification

This study suggests a limited connection between student participation in the EEP and the creation of human capital (graduating students with entrepreneurial intentions to

¹¹⁸ The Scottish devolved government has been following a strategy which aims to raise "employer demand for, and utilisation of skill" (Payne 2009, p. 490).

engage in entrepreneurial activities post-graduation) in ways that will facilitate the anticipated SME growth leading to economic diversification. One key finding is that while most interviewed students show an understanding of and positive attitudes towards entrepreneurship (Chapter 5), and develop some skills, they expressed little interest in undertaking entrepreneurial activities post-graduation, suggesting that entrepreneurial endeavours are unlikely to follow upon graduation for the reasons discussed in Chapters 6 and 7.

Of course, this does not necessarily mean that the skills students acquire through the programme will not generate other benefits for economy, for example, in stimulating more entrepreneurial behaviour in the public sector - considering that it is common graduation destination (see Chapter 6) - and this can be important for the country's economy and development (see Chapter 2 for explanation of public entrepreneurship). Similarly, it does not rule out the possibility that those participating in the EEP will become entrepreneurs later in life. That is not, however, what the State is trying to achieve through the introduction of the programme. The aim of the programme is to direct students into the private sector through entrepreneurship and SME start-up development and contribute to diversifying the economy in more immediate ways (i.e. post-graduation) (Oman Ministry of Higher Education 2015). This economic urgency to diversify the economy through entrepreneurship can be seen clearly when reviewing Visions 2020 and 2040 (see Chapter 2) and related entrepreneurship policy documents (see Chapter 3).

Whilst the EEP may create human capital in the form of entrepreneurial skills, it seems unlikely to produce the desired outcomes in terms of expanded entrepreneurial activity as numerous other factors are involved in increasing economic diversification (e.g., Rees et al. 1997; Wolf 2004; Becker 2009; Grugulis and Stoyanova 2011). These factors are discussed in the following section.

8.3.3. Cultural and Social Factors

The shortcomings of HCT and the assumptions inherent within it have been extensively discussed (Bowles and Gintis 1975; Rees et al. 1997), but the Omani rentier state provides a new context for a sociological critique of HCT: the notion that investment in education, and thus human capital, will increase productivity, enhance performance and provide a basis for developing and diversifying the economy (e.g., Fevre et al. 1999; Davidsson and Honig 2003; Wolf 2004; Becker 2009; Grugulis and Stoyanova 2011). As discussed in Chapter 6, social and cultural factors appear to have greater influence on young people's entrepreneurial ambitions than the programme (which seems to have had little influence on students' intentions, according to interview data). The EEP has not

tried, and would struggle, to change what are societally and culturally rooted attitudes and mindsets, which seemingly hinder the entrepreneurial spirit. The EEP can be evidenced to have contributed to changes in student perceptions of entrepreneurship, but there is little evidence that this has been enough to overcome the influence of the deeply embedded cultural aspects.

According to this study's empirical findings, one key cultural aspect hindering the EEP's success is the so-called 'rentier culture' prevalent in Oman. The data suggest that this culture is largely a result of the State's ability (until recently) to provide a significant amount of well-paid and secure public sector employment financed by oil revenues (see Chapter 6, Section 6.4.3). This has resulted, as Chapter 6 argues, in excessive dependence on the State. In turn, this has created a population which is strongly risk-averse, negatively affecting their desire to become entrepreneurs and contribute to private sector economic diversification. Furthermore, the so-called "diploma disease"¹¹⁹; which is so common in rentier states as to be regarded as a 'cultural factor' (see Beblawi 1990, p. 135), and high levels of educational achievement seemingly contribute to a lack of interest among the Omani population to starting small businesses. Such enterprise start-ups are often seen as beneath a person's educational level and in this regard the human capital investment seems counter-productive to the government's aims and ambitions.

In addition to cultural factors, this study found that social factors¹²⁰, in particular dependence on family, religious values, and friends, have led to a low level of individualism, undermining entrepreneurship growth (see also Elliott and Lemert 2006). Regarding the influence of family and friends, the data show that the few students who expressed interest in entrepreneurship did so mostly because a family member or friend is also an entrepreneur. At the same time, the majority who showed reluctance also seemed to be highly influenced by family or friends who work in the government, a commonly desired career pathway in Oman (see Chapter 7). The fact that Omanis' individual decisions are strongly influenced by family and friends indicates low individualism. Capitalist societies (e.g. the UK and the USA) exhibit higher degrees of

¹¹⁹ Having a degree for social prestige rather than economic need (see section 2.2.2 in Chapter Two).

¹²⁰ The key differences between cultural and social factors are that the former are related to material and non-material cultural elements such as changes in lifestyle, mentality, ideology, systems, and technology. Social aspects refer to changes in social institutions and relationships among people such as people's status and their roles, their educational background, age, family, friends and relationships with neighbours (Leege et al. 2009). Despite being aware of these differences between social and cultural aspects, this thesis clustered them in one head given that separating the discussion of them is not significant for this thesis, as discussed in Chapter 2.

individualism¹²¹, including more independent career decisions (Elliott and Lemert 2006). However, in Oman individualism is less prevalent, leading to greater cultural hesitation for pursuing entrepreneurial activities post-graduation. While the EEP is evidence of an effort to make these changes, it is too new to result in rapid changes in attitudes and mindsets, as would also be the case in other cultures (Gibb 1993).

Further evidence of the impact of social factors on students is the social conservativeness which varies from one part of Oman to another. The data indicate that people in rural areas are more conservative than in urban centres, which influences entrepreneurship intentions, particularly for women in rural areas. Chapter 6 shows that female students from rural areas in particular stated that their families are reluctant to allow their daughters to run a business where they will have to communicate and mix with men. Moreover, not only is family a major influence, but Omani society (and societies in the Gulf States more generally) is characterised as highly tribal, particularly in rural areas, where people respect the tribal leader and obey his instructions without question (Valeri 2013). In short, the data show that people living in urban areas are more likely to embrace entrepreneurialism because they are less influenced by the tribe and family.

Omani society thus lacks the necessary levels of 'individualism' typically associated with more entrepreneurial societies (Hayton et al., 2002; Ateljević and Trivić 2016), and suffers a social conservatism that hinders in equal measure such activity. Moreover, when comparing Omani society to western (particularly Anglo-Saxon) societies, I might argue that Oman's more generous welfare (tax free salaries, electricity and water subsidies, etc.) reinforces low self-reliance and high risk aversion in society. At the same time, the welfare system has not been expanded to support entrepreneurship, and provides no safety net for entrepreneurship activities – the institutional mechanisms available within some other contexts do not exist in ways to support entrepreneurial activity and this signals a lack of joined up policy (discussed further in the next section).

In short, developing human capital alone is a limited strategy for spurring economic development. Other cultural and social aspects are crucial for the successful expansion of entrepreneurial behaviours (Welter and Gartner 2016; Krueger 2017; Schmutzler et al. 2019; Afreh et al. 2019). The existence of cultural and social barriers makes Oman a society that is highly risk averse and low on individualism. As shown by Fayolle and Gailly (2015), Education and Training (ET) can encourage risk-taking. However, this

¹²¹ Beck (2012) assumes that individualism, which he defined as the free will of the individual who enjoys his/her own enlightenment and self-interest while simultaneously possessing the right to express his/her own political views, is important for democratic nations interested in creating entrepreneurial capitalism.

thesis found that the EE has so far not been able to encourage Omanis to change their views regarding entrepreneurship immediately after graduation – thus, I might ask what is it about the particular approach to entrepreneurial skills development in Oman that is lacking? I might also set this against an examination of the institutional frameworks, patterns of governance, and the wider political-economy that shapes the potential for transitioning, i.e. diversifying the Omani economy.

8.4. Entrepreneurialism and Oman’s Political Economy and Skill Formation System

This section links the discussion which addresses study objective 2 in the previous section and study objective 3 in the following section. This section discusses the extent to which Oman’s political economy, with its specific skill formation system, aims to promote entrepreneurialism and develop entrepreneurial skills and attitudes among Omanis. This study shows that the political and economic context is of critical importance with regard to the ways in which individuals understand and engage with entrepreneurialism, and develop entrepreneurial skills and positive intentions towards entrepreneurial activities. The following section discusses the implication of these factors for the policy’s central goal of economic diversification.

8.4.1. Political Economy of Rentier State: The Case of Diversification

Data analysis shows that the government has a huge impact on various aspects of people’s lives in rentier states which is a feature of them (Beblawi and Luciani 2015). A major reason for this is the top-down hierarchical structure of rentier states, which strongly encourages citizens to accept without question what the government mandates. This is indeed the case in Oman. For instance, interviewed students¹²² who took the EEP barely mentioned any non-materialistic social meanings when asked about entrepreneurialism (Chapter 5). In addition, the data show that the meaning of entrepreneurship is largely limited to materialism (starting a business and making money). This is likely due to the fact that the government has made it clear that the programme’s main goal is economic in nature due to the urgency to spur economic diversification. This narrative is also promoted outside of the education sector through the media and other avenues. For example, TV and radio programmes about entrepreneurship tend to discuss the business process only. On the whole, Oman’s governmental system enables it to disseminate a unified narrative on most topics, making its citizens highly likely to adopt it (Valeri 2013; Beblawi and Luciani 2015). Notwithstanding events such as the Arab Spring, such authoritarian states tend to

¹²² Students who did not take the EEP, were included in the survey. However, non-economic meanings were not included which is one of the survey’s weaknesses.

produce a largely passive citizenry with regard to policy messages. It is rare to see strikes or demonstrations against government policies; the only strike in the Gulf States' modern era took place in Oman in 2011. There is, then, a general compliance with, and acceptance of, state policy (Section 6.2), but this only stretches so far.

Indeed, based on the evidence here, the Omani state has struggled to overcome socially and culturally embedded patterns of behaviour. Whilst the government puts a mainly positive spin on the idea of entrepreneurship (including within the policies and documents consulted for this research e.g. MOHE guidebook) by over-emphasizing its economic merits (and thus the potential returns) and downplaying its shortcomings, most students expressed the intention to pursue a public sector career. Students were unsure as to whether they would be able to earn a living as entrepreneurs. They feel that public sector employment is more likely to provide an adequate regular income. Therefore, despite the EEP's efforts to frame entrepreneurship positively by focusing on the economic aspects (and thus gains), it falls short in leading students to pursue entrepreneurship aspirations and activities. As such, the policy narrative (rhetoric) of entrepreneurship can be accepted, but the expected/desired behaviour change will not necessarily follow. Similar reliance on public sector employment as part of the welfare state is seen in the UAE (Parcero and Ryan 2017). However, the successful implementation of entrepreneurship policies created an attractive entrepreneurial environment for Emirati undergraduates and thereby a competitor for employment alongside the public sector (Thomson and Minhas 2017).

Moreover, the welfare system, which Omani people enjoy in various aspects of their lives, has not been employed to support entrepreneurialism as yet. Oman lacks supportive institutional frameworks for engendering entrepreneurship such as safety nets, no-interest loans, or free technical and managerial support alongside other subsidies (e.g., electricity, education and health). Social protection to aid failed entrepreneurs or others who lose their jobs (e.g. unemployment benefits) are weak compared to other areas of welfare (e.g. subsidies for energy). This discourages the kinds of risk-taking behaviour associated with entrepreneurship (see Chapter 6). Venkataraman (2004, p. 150) argued that such "safety nets", e.g., providing a failed entrepreneur the opportunity to try again or a job in an established company, have been successfully implemented in places such as Silicon Valley, Dublin, Austin, Bangalore, Tel Aviv and others. This reduces the stigma of a failed business and welcomes the human capital that engendered it. Despite the weak welfare system in the USA, there is a cultural acceptance of failing at business which does not result in stigma that will prevent individuals from 'trying again' (McKay 2001).

Furthermore, this study argues that political factors (see Chapter 6) have remarkable significance on people's entrepreneurial understandings and attitudes. A powerful State authority imposing a mandatory policy seems to be in a better position to speed up the process of policy implementation. If the HEIs in Oman were given the choice, most might not have introduced the programme due to their limited financial and teaching staff resources. This is particularly likely for private institutions, as one private HE manager indicated. The fact that half of HEIs have failed to introduce the EEP despite the MOHE's mandate is also proof of this. This degree of State intervention in the education sector occurred due to economic urgency and mirrors the emphasis given to educational initiatives and investments in newly industrializing states, e.g. Singapore, South Korea (Ashton et al. 2005) .

However, the top-down political structure of a rentier state often leads to limited public engagement, making policies less effective. When the entrepreneurship initiative was developed by policymakers, other stakeholders were not consulted, which is consistent with this type of political system. This is clearly shown in the data as most participants, students and lecturers, stated that lack of engagement with the higher education sector in developing the policy is partially responsible for its limited effectiveness. Many past studies e.g., Gerston (2014) have been advocating for more public engagement in the policymaking process for this reason.

Indeed, the level of entrepreneurialism in other rentier states is more dynamic (e.g., the UAE and Qatar where extensive State support and a strong welfare system reinforce entrepreneurial activities) and lessons might be learnt on how to facilitate the transition into more entrepreneurial activities (see Chapter 2). Among the six GCC states, the UAE has achieved most success in diversifying the economy through entrepreneurship thanks to successful policy implementation (Miniaoui and Schilirò 2016) – the UAE has implemented an EEP in its HE sector similar to Oman's. However, the UAE has a high quality education system, which ably supports delivery of its EEP policy and has increased the potential for developing entrepreneurial skills and intentions compared to other GCC states (Hameed et al. 2016). The UAE and to some extent Qatar, has focused on expanding the private sector particularly high-productivity industries (e.g., chemistry, engineering and technology) through vast investment in human capital with an emphasis on high-skills. Creating supply through the State's high financial capacity to finance the "high-quality" education sector is met by creating the demand for these high-skills. This has been done by creating an innovative environment (e.g., R&D, incubators, support for innovative SMEs based on scientific research) and business environment (e.g., easy regulations and funds availability for SMEs) (Miniaoui and Schilirò 2016). There might well be some answers for Oman here (from its neighbours,

as well as elsewhere) and critical analysis would support a focus on quality over quantity (e.g. Wolf, 2004) and a need for supporting institutional frameworks and a coherent industrial strategy (as within Developmental States), but more comparative research is needed within rentier state contexts.

8.4.2. Omanisation and the Private Sector

Oman's private sector confronts diverse challenges, such as foreign labour domination, small contribution to the national income, and limited service sectors, making it difficult to employ HE graduates. Its desire to shift from general and low skills is related to Oman's efforts to develop the private sector and enable it to absorb an increasing number of graduates. . In some ways, it mirrors approaches taken in Developmental State economies such as the Asian Tiger economies which experienced rapid economic development based on massive investments in education during the late twentieth and early twenty-first centuries. In those economies however, investment in education and infrastructure was also aligned with a clear industrial strategy (Woo-Cumings 1999) (see Chapter 2).

This study's analysis found that a further problem confronting Oman's private sector is a lack of entrepreneurial infrastructure¹²³ required for the country to realise its ambitions to use entrepreneurship to diversify the economy. Oman has introduced a number of initiatives and programmes, but this study's survey and interview data (Chapters 5-7) suggest that more infrastructure investment is needed. Data indicate that although policies and regulations that facilitate entrepreneurship and SME start-ups exist, implementation is weak (see Chapter 7). For example, as some interviewees suggest, despite sufficient funds being available for entrepreneurs, the criteria for selecting applicants for funding are weak and often unfairly implemented (as discussed in Chapter 6).

The UAE, which has a rentier state context similar to Oman's, provides evidence that rentier state contexts have the potential to develop entrepreneurship if the appropriate policies and infrastructure are implemented well. Its successful model of creating and encouraging entrepreneurial infrastructure has placed it at the top in global entrepreneurship index (Miniaoui and Schilirò 2016). Further research is needed to investigate the possibility of applying the factors contributing to the UAE's success in entrepreneurship to Oman's context, given that there are fundamental differences alongside the many commonalities between the two countries (see Chapter 2).

¹²³ Encouraging rules and regulations, funding, incubators etc (see Chapter 6).

Oman's justification for promoting entrepreneurship and SME' development through a policy of higher education expansion and the EEP is the urgent need to create private sector jobs for Omanis and reduce foreign labour. These policies, however, were rushed and poorly planned, a common feature of rentier states, as Beblawi (1990) noted¹²⁴. This finding has been confirmed by Omani scholars such as Al-Maskery (1992); Al-Lamki (1998); and Al-Kindi (2007). On the other hand, Oman needs to think carefully about the important role that expatriate workers play in some sectors and acknowledge that they might also have a role in entrepreneurship growth. This is an issue that has not been addressed within this thesis, but would benefit from further study and would be informed by the conclusions herein proffered.

Another aspect to consider is that Oman's private sector is currently limited to a small number of sectors. The majority are, as noted in Chapter 6, in the service sector -e.g. tourism and logistics. This restricts student understandings of entrepreneurship and the types of businesses they might want to enter. Consequently, none of the students interviewed for this thesis expressed a desire to find employment or pursue entrepreneurship in heavy or medium industries right after graduation, as discussed in Chapter 6, Section 6.3.3. Such underlying structural issues shape the understanding of entrepreneurship and the willingness to take part in entrepreneurial activities in Oman. Other countries that provide free higher education (e.g., Singapore, Germany, etc.) develop graduates' skills to strengthen their private and industrial sectors (Sung 2006). However, in Oman the private sector is weak and is not able to absorb Omani graduates due to the lack of demand or an appropriately supported industrial strategy (see Chapter 3, Section 6.3.3).

8.4.3. Education and the Skill Formation System

This study found that Oman's education sector and skill formation system do not particularly enhance entrepreneurial skills development. Apart from the EEP, there is a shortage of EE programmes, incubators, and EE integration in HE and primary and secondary schools. In addition, Oman's private sector is not able to incubate entrepreneurial activities, and the EEP's potential to develop entrepreneurial skills is limited as a result. The discussion in this section addresses subsidiary research question 4. The study's contribution in this area of enquiry provides insights into an economy looking to diversify through skill formation and highlights issues of skill mismatch. Overall, scant research has discussed EE as part of wider skill formation system (Nijhof 2005; Olssen and Peters 2005), and even fewer skill formation studies have been done

¹²⁴ With the exception of a few countries as recent studies e.g., Miniaoui and Schilirò (2016); Ennis (2018) have argued, rentier state countries such as the UAE and Qatar have been creating supportive infrastructure and implementing successful entrepreneurship policies.

in rentier state contexts (Al-Shammari 2009). This study contributes to this literature by connecting EE to skill formation system in a rentier state context.

As this study is one of the first to comment on skill formation in rentier states, I attempt to position Oman's skill formation system. This study has argued that Oman adheres to normative strategies of skill formation, informed by HCT, much as elsewhere (Monkge 2001; Lauder et al. 2008; Streeck 2012; Gospel et al. 2013). However, it adopts a political economic system that is informed by authoritarian structures, which differs from many developed countries where similar policy strategies are employed (there is, for example, the absence of democratic structures and a singular dependence on natural resources). Rentier states have not previously considered their main resource to be their human resources (in comparison with, for example, Singapore, which is also authoritarian) - the focus here has been on oil and gas (and largely remains so) and State control and acquiescence of its population (similar to Singapore on this last point), rather than skills. Skill formation systems have thus been underinvested and the economic strategy is typical of countries in transition, requiring development of constructive human capital over time (sudden investment can come as a shock, which is evidenced by the inability to use the skills now supplied). Broader institutional mechanisms (and the labour market) do not, moreover, currently support the intended aim of creating an entrepreneurial and diversified economy. Consequently, whilst shifting towards something approximating a developmental state approach, it is one that is characterised by, among other things, limited stakeholder input on policies and weak entrepreneurial infrastructure.

When reviewing skills policy in Oman, its wider skill formation strategy and recent reorganization of the education sector into more technical specialties (e.g. changing the five colleges of education into colleges of applied sciences) (Oman Ministry of Higher Education 2015), this study argues that there is a contradiction¹²⁵. These changes aim to help people develop skills in order to work in more diversified industrial sectors, i.e. outside the energy and service sector. However, the labour market is non-industrial and mostly concentrated in the energy and service sectors (see Chapter 3 for more explanation) and hence it has not been able to absorb these skills. The mismatch between skills supply and labour market demand in Oman (Belwal et al. 2017) has resulted in mismatches that have confused students regarding what potential sector to engage with if they decide to pursue entrepreneurial activities post-graduation. The point is that Oman needs a dynamic industrial strategy which has a clear sectoral focus but also explores other potential sectors (Ashton and Sung 2015). A strategy should be

¹²⁵ Such contradiction caused by mismatch between education outcomes and the actual needs of the labour market is commonly seen in transitioning economies of rentier states (Thompson 2020), but also can be seen in developed countries such as the UK (Holmes and Mayhew 2015) and Singapore (Chia 2017).

responsive to Oman's current and future private sector demand and the type of entrepreneurial activities which students can engage in. Examples of these potential private sector entrepreneurial activities are currently absent from the EE policies and curriculum, which, as the data show, explains students' low intentions to undertake entrepreneurial activities.

Study interviewees explained that Oman imports most of its products from abroad as Oman's current industrial structure cannot manufacture them. The lack of such a manufacturing infrastructure creates an experience gap, both for Omani citizens in their employment opportunities and policy makers in their understanding of how to provide the necessary foundations for industrial development. Indeed, such businesses are absent from the EEP curriculum (as models), and it is therefore of little surprise that those who took the programme did not mention them as potential options for entrepreneurial endeavours. However, the introduction of the EEP in disciplines of study such as engineering indicates that the government wants to spur entrepreneurial activities in medium and heavy industries and that they can be developed by Oman's private sector. One of the drivers for initiating the entrepreneurship policy is to develop technical and entrepreneurial skills in various industries to reduce reliance on imports as well as develop exports (see Tanfeedh 2017). Therefore, whilst the EEP is aimed at developing the skills necessary to start SMEs, the curriculum falls short of raising the profile of the industrial sectors it wishes to develop. This is one of the consequences of extensive policy and curriculum borrowing with no adaptation to Oman's needs, e.g., industrial sectors. Similar issues with misguided policy and curriculum borrowing can be seen elsewhere (Steiner-Khamsi 2014; Revina and Leung 2018; Mori and Stroud, Forthcoming).

The previous section highlight the contribution of the thesis to the broader literature on HCT and Entrepreneurialism, adding Oman, a rentier state economy, to the research body of skill formation strategies. The following section discusses the EEP more closely by looking at how the programme was implemented across three HEIs and suggesting ways to develop it.

8.5. EEP Implementation

This section addresses study objective 3 and sub-question 4. The study, consistent with previous studies (e.g., Armstrong et al. 2006; Finlay et al. 2007), has revealed the complexity of policy implementation and how this has been impacted by particular contexts that exist within given locations (see Sections 3.3.4 in Chapter 3 and Section 8.2 in this chapter). This section explains why the programme has not achieved its objectives by focusing on "internal factors", with particular reference to the quality of its

implementation and programme duration. The section also discusses how these two aspects have subsequently affected the EEP's outcomes.

8.5.1. Programme Quality and Duration of Delivery

As explained in Chapter 7, Oman has aimed to introduce the programme in as many HEIs as possible, rather than delivering the programme in more targeted and progressive ways. This has been done for two reasons: 1) to capture as many individuals harbouring entrepreneurial ambitions as possible and 2) to spur economic growth as quickly as possible. However, this focus on coverage rather than quality seems to have undermined the EEP's ability to promote entrepreneurial skills acquisition and engagement – see also Palmer (2009) for an analysis of the case of Ghana. The data show that the EEP lacks a high-quality curriculum, is delivered by unqualified lecturers, and does not include extra-curricular enrichment activities (such as entrepreneurship centres and incubators). This study identifies three reasons to explain these EEP's delivery shortcomings.

First, sufficient resources have not been dedicated to developing a coherent and high-quality programme. The EEP design was rushed, and the programme had no additional resources attached to it. Institutions are ill-placed to deliver the programme without investment. The majority of Oman's HEIs are low quality given that they are newly established and have limited human and financial resources (Al-Barwani et al. 2009). This has affected the delivery of the EEP. The requirement for all HEIs to introduce the programme is consistent with wider aspects of Oman's educational policy, which prioritizes investment in coverage over quality. UNESCO statistics show that enrolment rates in primary, secondary, and tertiary education within Oman were high as of 2016: 94.12%, 95.06% and 44.6% respectively (UNESCO-UNEVOC 2016). Despite this, Oman is low on the education quality index, at 103rd out of 180 countries (The United Nations Development Programme 2016). A larger number of enrolled students (programme coverage) means a higher chance that some of these students could be attracted to entrepreneurial activities. However, the quality of what is taught and how it is presented is equally significant if the stated aims are to be realised. A number of studies such as Wolf (2002) and Wolf (2004) argued that a focused high quality delivery (e.g. aimed at high achievers or those expressing an interest in particular disciplines in particular universities) is more effective for facilitating economic growth.

Second, making the EEP mandatory quickened its implementation in many HEIs and helped cultivate sound understandings and positive attitudes towards entrepreneurial activities. However, making a course compulsory does not necessarily result in the anticipated outcomes. A study by Yusuf (2019) examined a mandatory university EE course in Nigeria, which led to students acquiring certain skills such as self-reliance but

not other more essential skills, such as business planning and creativity. Although in Oman's EEP can help students develop these skills, to some extent, as discussed in Chapter 7, these do not result in shifting students' intentions to entrepreneurial activities. The data show that this mandatory policy has been neither sufficiently supported nor funded by the government despite the large amount of resources the State has at its disposal (as discussed in Section 9.3.3). Distributing a guidebook and imposing ministerial directives without offering financial and technical support for this newly introduced initiative has proven insufficient to help HEIs successfully implement the programme. This has led to implementation shortcomings, as almost half of HEIs have been unable to implement it due to limited financial and human resources. This might also signal an "indifference" to the policy as government has not made investing in and implementing the programme a high priority despite its ambitious aims¹²⁶. As discussed later (Section 9.4.2), the policy favours wide coverage at the expense of quality: this study found patchy coverage and low-quality implementation in most HEIs. Even with regard to those institutions that have introduced the EEP, a lack of qualified teaching staff, training, infrastructure (e.g. entrepreneurship incubators and centres), and funds exemplify the challenges that HEIs face, limiting the potential of the programme.

A third issue is young people's lack of exposure to the concept of entrepreneurship and the need to introduce notions of private enterprise earlier in their educational careers. The short period of delivery of EE in HE appears, according to this study's data, insufficient for developing entrepreneurial skills and changing student mind-sets. Previous research has shown that introducing entrepreneurship earlier can equip students with skills that make them more likely to develop more entrepreneurial attitudes (European Commission 2015b, p. 86 –see also Chapter 3 which presents the UK model, which embeds EE in the primary and secondary school levels (School Education Gateway 2015) and also offers it in most HEIs).

In Singapore, like Oman, there is no curriculum integration of entrepreneurship at the school level, with the exception of a few schools (e.g., the School of Science and Technology) specifically designated to make students "entrepreneurial" through providing local and international attachment¹²⁷ opportunities (Ng 2012, p. 377). However, entrepreneurship has a stronger presence not just in HE, as most Singaporean universities provide different entrepreneurship programmes, but also in the culture (Fernández-Serrano et al. 2018). This section has provided an analysis of some key

¹²⁶ Statistics show that most government investments still go to the oil and gas sector (Oman National Centre for Statistics and Information 2019).

¹²⁷ Internship programmes for students to work in local companies or international entities (e.g. Silicon Valley in the US) to nurture their entrepreneurship and business start-up experiences.

issues with the implementation of the EEP. The following section discusses the outcomes that the EEP can achieve based on its implementation and performance.

8.5.2. Programme Performance and Outcomes

The purpose of this section is to discuss the EEP's expected outcomes and which of these can more directly contribute to the aim of making the EEP contribute to diversifying the Omani economy. The findings suggest that the EEP is unlikely to achieve this aim. Although creating understandings and attitudes and developing skills are positive outcomes, only changing students' intentions into entrepreneurial activities post-graduation can contribute to diversification and Omanisation, and the programme has limited potential to achieve this.

The results of the student survey across 31 HEIs (and follow-up interviews with students at three selected study sites, as well as analysis of Omani policy documents) revealed four main expected outcomes for the programme. In relation to three of them, the programme was reported to have brought about positive results ¹²⁸:

1. Created entrepreneurship understandings and awareness,
2. Formed general positive attitudes towards entrepreneurship, and
3. Developed some entrepreneurial skills, particularly at high-ranked HEIs.

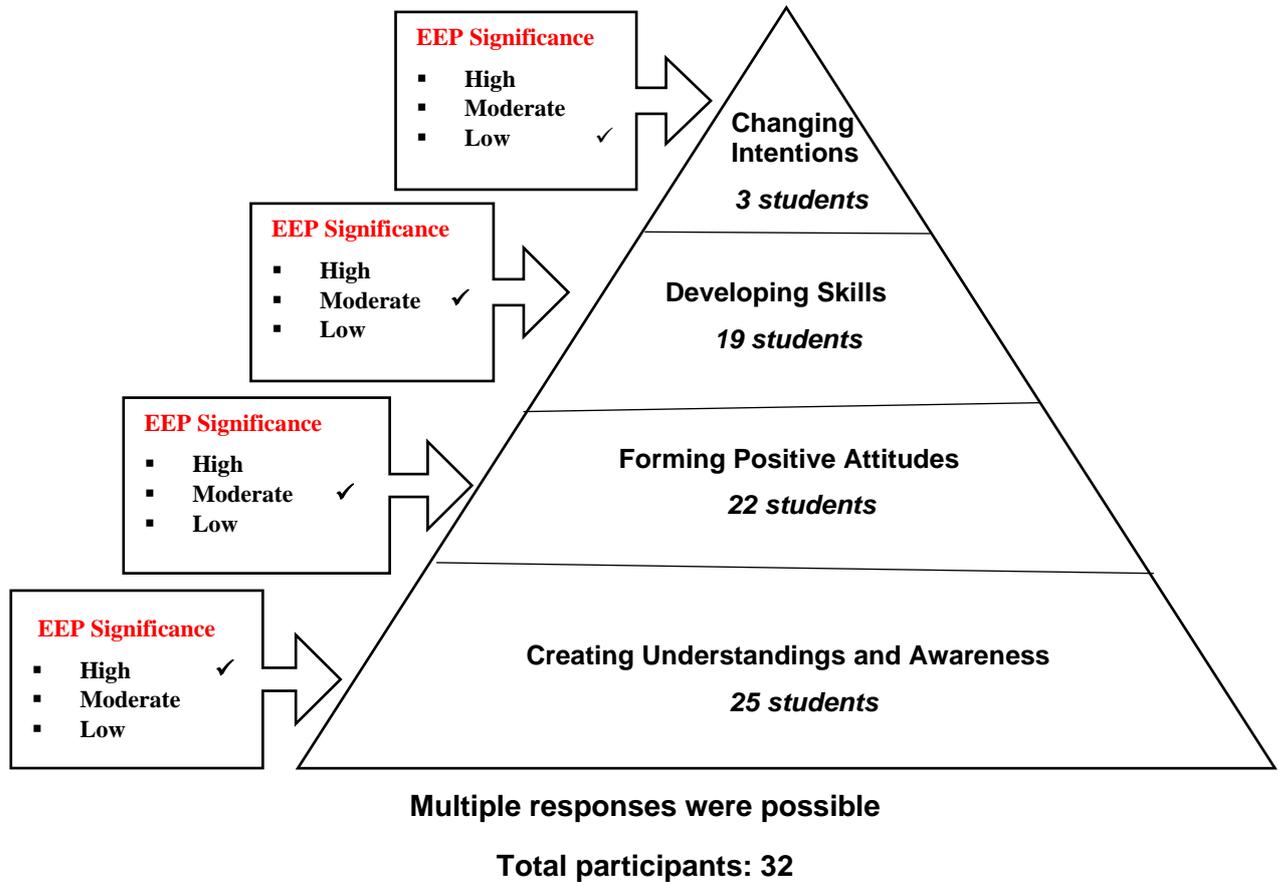
However, the programme has not, in its current form:

4. Turned HE students' intentions into entrepreneurial activities.

Figure 8.1 below, reflects on the programme's significance in achieving these four outcomes and its ranking among other factors, as determined by this study.

¹²⁸ The study shows that these four outcomes are more likely to be achieved at high-ranked HEIs than at low-ranked ones.

Figure 8.1 EEP Significance and Expected Outcomes



Source: Interview data

Figure 8.1 above provides an indication of the EEP's influence on the achievement of the specified outcomes. The degree of achievement of the expected results decreases when moving up the pyramid, according to student and other stakeholders' views expressed during the interviews undertaken for this thesis¹²⁹.

The EEP's significance has three levels: high, moderate, or low based on the number of interviewed students (see above Figure 8.1) who mentioned that they have gained each outcome. For example, interviewee responses to the semi-structured interview measure the first outcome: What makes you understand entrepreneurship the way you do? Does that make you create a positive attitude, develop skills, or change your intentions? Out of total 33, 25 students stated that the EEP created understandings, resulting in a high ranking, whilst only 3 mentioned that the EEP had changed their intentions, resulting in a low ranking, as illustrated in Figure 8.1.

¹²⁹ There are no official statistics (at the time of writing) on the number of EEP students who decided to become entrepreneurs post-graduation.

The EEP appears powerful in delivering basic knowledge pertaining to entrepreneurship, e.g. what entrepreneurship is, who entrepreneurs are, what entrepreneurial traits are, and how to start a business. It has also contributed to the formation of mostly positive generic attitudes towards entrepreneurship, suggesting that both factors are interconnected -i.e. having a positive attitude is the result of a sound understanding of the process itself and vice versa. This is consistent with the findings reported by Meece et al. (2006), who found that primary and secondary school settings which focus on creating understanding of a subject lead to the formation of positive attitudes about it. By contrast, the evidence collected in this thesis does not support the view that this educational programme caused participants to change their intentions (see also Chapter 7).

Second, developing some awareness and a general positive image of entrepreneurship seemed to spark student interest in acquiring entrepreneurial skills and becoming entrepreneurs at some point, but not immediately¹³⁰. As discussed in Chapter 7, some students said that taking the EE did not give them the chance to develop entrepreneurial skills. However, it encouraged them to try other useful activities such as individual self-learning on entrepreneurship through signing up for courses or online sessions or joining a work experience.

Finally, the fact that only three students expressed intentions to start a business right after graduation indicates the EEP's very limited potential in this respect. Two of these students, additionally, mentioned that even though the programme had a major impact, they also had other individual motives¹³¹: one has a father who is an entrepreneur and the second one has an uncle who invited him to work in his factory during the summer holidays. These examples confirm the importance of stimulating students' engagement in entrepreneurial activities through initiatives both within and outside the education system (see Chapter 9).

The finding is consistent with Khalifa and Dhiyf (2016), who found that the EE in the UAE has not affected HE students' intentions despite the fact that it has some efficacy in developing skills and attitudes (Saji and Nair 2018). As discussed in Chapter 2, the UAE has a larger amount of entrepreneurial activities due to mostly external factors such as a stable and large private sector, an attractive entrepreneurial environment (e.g., funds

¹³⁰ It is worth noting that there is not an absolute evidence for skill acquisition as the study did not involve a method for that. Study depends on students' spoken perceptions.

¹³¹ Several studies contend that family (see for example, Menges et al. 2017) and friends (see for example, Okdie and Wirth 2018) are a crucial source of either positive or negative motivation for individuals. Afreh et al. (2019, p. 996) emphasise the impact of "family and community networks" on migrant youth entrepreneurs' decisions and motivations in Ghana.

and simple rules and regulations), general entrepreneurship policy implementation, and an overall high quality education system etc.

8.6. Conclusion

The main finding of this thesis is that the government is following an EE approach that is not yielding the expected results. It is not changing intentions for entrepreneurial activities, even if it is developing understandings and delivering some entrepreneurship-related skills to participants. The institutional framework for entrepreneurship remains weak according to most interviewees, except policymakers. As discussed in Chapter 2, Section 2.5.3, contextualising entrepreneurship is important to understand the findings of the research. It confirms the importance of the spatial facet (Welter and Gartner 2016; Welter et al. 2019) in its examination of the rentier state context and its impact on stakeholders' cognitive perceptions and attitudes. It also helps to understand the historical impact (Welter and Gartner 2016) through tracking Oman's present urgency to diversify the economy through entrepreneurship, which has led to a rushed and flawed EE policy.

This study shows how other contextual factors outside of the EEP – such as the characteristics of Omani culture and society - carry considerable weight in shaping the likelihood of entrepreneurial activity. This is in line with studies such as Nabi et al. 2017; Rhoades and Smart 2018. What is new in this study is the identification of the influence of social and cultural aspects related specifically to rentier states such as the rentier mentality, high uncertainty avoidance, and low individualism. On the other hand, rentier states (the UAE) with similar social and cultural aspects, but higher economic capacities, show far more progress in terms of developing more entrepreneurial activities. This indicates that there is a potential for such rentier state contexts to develop more entrepreneurship if better infrastructure and policy implementation are provided.

First, although the EEP as presently configured has helped students acquire some skills, these are unlikely to be used. Moreover, the question is whether the EEP adds much in relation to skills development given that the skills gained were generic and could be delivered within students' regular degree programmes. For example, the communication skills component of the EEP is a common soft skill that students acquire in many typical degree programmes. There is, therefore, no clear value-added that the programme contributes to entrepreneurship skill formation. However, it is worth noting that the level of skill acquisition varies depending on HE institution – whilst these skills are not new, they can be utilised for entrepreneurial activities. Study Site One is an example of a programme which has taught skills such as innovation, management and financial skills relatively well. This indicates that programmes such as Study Site One's could be cases

of good practice in Oman which could help improve overall programme delivery, for example, regarding the need to balance theory and practice and adapt the curriculum to Oman's environment, both of which can be seen more in Study Site One than in the other study sites.

Second, even if these generic skills could be related to "entrepreneurial" activities, this did not result in students considering entrepreneurship as their first option post-graduation (see Chapter 7). There is also a gap between the skills that the programme aims to develop and those that entrepreneurs consider important for entrepreneurship. Therefore, the programme is unlikely to produce many students who intend, post-graduation, to engage in entrepreneurship - certainly not as many as policy makers envisaged¹³². Therefore, Oman's EEP, in its current form, seems unlikely to create entrepreneurial human capital for economic diversification through increasing the number of students interested in pursuing entrepreneurship, which was the main aim for initiating this programme. That does not mean, however, that EE cannot achieve this, as it has proven effective in graduating potential entrepreneurs who contribute to the national economy in other contexts, e.g., the US (Kuratko 2005) and Europe (Van der Sluis et al. 2008).

The finding that the EEP has limited potential for economic diversification is inconsistent with various successful models in the UK, the USA and Singapore, as discussed in Chapter 2. What is new about this study is that the programme's limitations are due to wider contextual political, economic, cultural, and social factors related specifically to transitioning economies in a rentier state context. This is a central critique: that such programmes cannot just be bolted on to produce a change in the economy, but that wider (contextual and cultural) change is required that encourages, for example, more risk taking and entrepreneurial spirit (alongside a whole range of other changes, see Chapter 6). Moreover, Oman seems to be focusing on some aspects of entrepreneurship and narrowly defining it for its economic purposes while neglecting other important aspects, such as the importance of setting effective planning and industrial strategies to encourage a strong private sector or employing its generous welfare system to offer levies and subsidies to encourage entrepreneurship development.

Other rentier states with novice experience in providing EE in their HE sector (e.g., GCC states), have similar issues in their EE programmes. Yet, some of them (i.e., the UAE and Qatar) have performed well in the global entrepreneurship index, which indicates that having EE is important but not the only trigger for entrepreneurship. Oman can learn

¹³² There is no particular number of students which the government hopes will become entrepreneurs, but it is clear from the documents that the bigger the number is, the faster that they believe economic diversification through entrepreneurialism will be achieved

from these countries particularly in strengthening the private sector, implementing an industrial strategy, providing a supportive entrepreneurial infrastructure, and providing an encouraging entrepreneurial environment which includes simple institutions and available funds. Chapter 9 discusses more suggestions for improvement.

9. Chapter Nine: Conclusion

9.1. Introduction

This thesis has aimed to develop a better understanding of entrepreneurialism and entrepreneurship education in the context of Oman – a rentier state. With the diminishment of oil and gas reserves and their declining relevance as a source of energy, along with political and social challenges in the Middle East region, rentier states must increasingly look to diversify their economies. Expanding entrepreneurship and entrepreneurial activity by implementing education programmes has been identified as one solution in this context. In short, the government of Oman wishes people to start SMEs and aims to help them develop the skills needed to do so through human capital investment in an entrepreneurship education programme. However, this thesis argues that Oman needs to consider a broader range of issues, alongside investment in education, to form an appropriate entrepreneurship policy – if, indeed, entrepreneurship is an appropriate strategy in the first place at this stage of Oman’s development. Oman is struggling with its transition towards greater entrepreneurship because of the weakness of its economic and industrial strategy plans and the need to address deeply embedded social and cultural resistance.

This chapter concludes the thesis by summarising the findings and addressing the research questions and objectives (Section 9.2). Then, the chapter highlights the contributions made to the literature by commenting on the limited ability of human capital imperatives to diversify rentier state economies (Section 9.3). The chapter also suggests various practical ways to increase stakeholder (particularly HE student) interest in entrepreneurship (Section 9.4). These recommendations can be a reference for Omani policymakers, entrepreneurship education practitioners (HEIs managers and lecturers and entrepreneurship trainers) and students. Finally, the chapter discusses the study’s limitations (Section 9.5) and recommendations for future research in education policy and entrepreneurship in rentier states (Section 9.6).

9.2. Research Questions and Objectives

This thesis has attempted to answer the main research question: **How is Oman Entrepreneurship Education Programme (EEP) in higher education perceived to contribute to the aim of economic diversification in Oman?** and the four sub-questions below – associated to three objectives.

Objective 1: To explore Omani HE student, faculty/staff, policymaker, and entrepreneur perceptions and understandings of entrepreneurialism.

Sub-question 1: How do HE students and EEP stakeholders understand entrepreneurship?

Sub-question 2: What is the role of the EEP in shaping HE student' and faculty/staff entrepreneurship understandings and aspirations?

Objective 2: To examine Oman's political, economic, cultural and social specificities, as shaping and facilitating of i) entrepreneurship understandings, and ii) engagement with entrepreneurialism.

Sub-question 3: To what extent does Oman's political, economic, and cultural context impact EEP stakeholder understandings of entrepreneurship and their engagement in entrepreneurial activities?

Objective 3: To investigate, through the lens of its EEP, the perceived potential of Oman's policy for entrepreneurial skills formation.

Sub-question 4: How likely is the EEP, in its design and implementation, to overcome barriers to entrepreneurship, expand the entrepreneurial skills supply, and increase the number of graduates who become entrepreneurs?

Regarding the first objective, the thesis found that Omani entrepreneurship stakeholders hold almost conventional understandings of entrepreneurship broadly in line with those held elsewhere according to the literature discussed in Chapter 2. There are some differences among the four groups in terms of prioritising entrepreneur characteristics, but overall participants recognised similar entrepreneurial traits, as discussed more broadly. The EEP plays a significant role in shaping these understandings and promoting entrepreneurship awareness, leading to mostly positive perspectives. However, such views and the aspirations they lead to, seem unlikely to translate into concrete intentions to pursue entrepreneurial activities. Of course, I do not know at present what employment or career our interviewees (and survey respondents) might follow, but if the intention of the EEP is for the immediate expansion of the entrepreneurial activity of graduates, and as a result the diversification of economic activity, then it seems unlikely to meet its aims.

Indeed, with regard to the second objective, the contextual specificities of Oman as a rentier state have a significant impact on shaping entrepreneurship intentions. Although these specificities vary in their influence, cumulatively they hinder entrepreneurial activities. There is a clear political desire to employ entrepreneurship for economic diversification, but the institutional framework appears too weak to adequately support this aim. The risk averse culture and society are, moreover, not supportive for young entrepreneurs in general and undermine the efforts of policy makers – the EEP policy

does not address these wider issues. In short, simply bolting the programme onto the HE sector fails to address most of these factors, which are discussed in Chapter 6.

Regarding the third objective, and focusing on the EEP itself, it appears that the programme is being delivered in ways that can, to large extent, create conventional entrepreneurial understandings, generate positive attitudes about entrepreneurship and, to some extent, develop entrepreneurial skills (mostly in high-ranked HEIs). However, there has been more limited progress in changing intentions. This effort to change intentions has made limited progress and has not caused graduates to engage in entrepreneurial activity, particularly SME start-ups, immediately after graduation, which is the government's goal¹³³. As discussed in Chapter 7, the key reasons that limit the EEP's ability to produce the intended outcomes of expanding entrepreneurial activity, employing more Omanis in the private sector, and diversifying the economy are limited investment in the EEP and poor implementation.

Therefore, in response to the main question of whether an undergraduate EEP could contribute to the aim of economic diversification in Oman, this thesis found that **there is little likelihood that the EEP, in its current form and in view of Oman's specific political, economic, cultural and societal context, will contribute to diversifying its economy**. In making this argument, this thesis' makes the following contributions to current understandings of entrepreneurship, skills formation and rentier states.

9.3. Theory and Practice Implications

This study explores the implementation of an entrepreneurship education policy in a rentier state economy. It stands as a specific contribution to understandings of rentier state economies in transition, particularly as reliance on gas and oil resources can only diminish – given the finite nature of such resources and global pressures to reduce reliance on such fuels. Oman has relied on its natural resources but must seek alternative ways to support its economy and the government recognises this. What this thesis offers is a critical account of the Omani government's efforts to transition from a rentier state economy, by means of a skills formation strategy to diversify the economy and encourage entrepreneurial activity and business start-ups among new graduates.

Hence, the first contribution of note rests on the specific context covered, as outlined above, and a contribution to the research literature on how this type of state attempts to deliver economic diversification through entrepreneurship (e.g., Sánchez 2013; Fayolle

¹³³ As discussed in Chapters 6 and 7, there is a remarkable difference between the EEP's ability to create general positive attitudes about entrepreneurship and its ability to shift student intentions and mindsets into engaging in entrepreneurial activities.

and Gailly 2015; Schmutzler et al. 2018). In essence, this thesis has added a greater degree of understanding to the knowledge base of economies attempting to transition and diversify through skill formation. Such a contribution provides insights for policymakers and practitioners, particularly those developing HE programmes and initiating other complementary programmes outside the HE arena, as the following section discusses.

This study provides a critical account of the political economy of skill formation within rentier state contexts. Whereas much has been written on skill formation within liberal and coordinated market economies, as well as developmental states, this thesis offers a specific contribution to understandings of a rentier state's attempts to utilise skill formation to facilitate economic transition. Parallels might be drawn with developmental states and the emphasis on investment in skills for rapid economic development, particularly as they share authoritarian tendencies, but rentier states are distinct in numerous ways. This thesis's account offers a contribution to understanding how such states aim to transition and the obstacles they face – clearly Oman seems to be a long way from the success of Singapore and other economies in that region (Ashton et al 2002).

Second, this thesis also adds to critical understandings of how education policies based on human capital imperatives play out. What is new is the rentier state environment within which this critical account takes place. Oman's implementation of policies reliant on the imperatives of HCT (e.g. expanding the supply of graduates and expanding the supply of particular skill sets) for economic growth and diversification is flawed in various ways, as this thesis discusses. Similar to elsewhere, the narrow logic of skills development as a pathway to economic growth and social cohesion is indeed flawed (Lloyd and Payne 2003).

Third, this study develops arguments concerning human capital investment and economic growth literature by focusing on the type of education (subject of study) rather than the level of educational attainment. Clearly, the programme is aimed at higher education students (in terms of level), but the type of education is also a principal focus. That is to say that many countries focus on expanding skills supply in quite general ways, and this tends to be a focus of human capital investment (e.g. expanding graduate numbers to serve the knowledge economy), which is heavily supported at government and intergovernmental levels, e.g. the OECD (Brinkley 2008). However, there has, in some countries, been a focus on specific subject skills, such as STEM and these subjects have attracted targeted investment (Chapter 2, Section 2.7.3 presents models

of EE in three countries). However, such human capital investment is discussed less in the literature on human capital theory. This study's contribution is to provide some basis for arguing that subject orientated human capital investments aimed at generating both individual and national benefits have limitations.

9.4. Policy Recommendations

Given that this study has argued that the entrepreneurship and EE policy in its current form and context is unlikely to achieve what the government wants, i.e. contributing to economic diversification, it seems that efforts should be better focused (either elsewhere or implementing a less flawed entrepreneurship policy or programme). As discussed in Chapter 6, one main issue with the policy is that it invests in skills development to supply the market with entrepreneurs, yet the ability of the economy and infrastructure to accommodate those entrepreneurs is weak. Oman's large state investment can be better directed to support start-ups. These strategies have been used in developmental states such as Singapore and South Korea to develop their economies – including but also beyond skills investment (Green et al. 1999). As discussed in Chapter 2, creating “high-growth entrepreneurship” through a “picking winners” approach (Autio and Rannikko 2016, p.42) is another effective government strategy. This approach which has proved successful in some countries such as Germany (Stockinger 2019), can be an alternative or complementary policy alongside the current EEP policy. However, a study needs to investigate if this approach has the potential to work in the Omani context. If the Omani government's aim remains expanding entrepreneurship, then the following requires consideration.

HE policy: Incorporating entrepreneurship within higher education requires several considerations. The EEP's in its current form has many shortcomings and a different approach might be able to increase its effectiveness. For example, the programme could be more focused and target those already considering entrepreneurship, as is the case in Singapore (see Section 2.6.3.3). This could involve selecting students with an interest in and/or talent for entrepreneurship and offering them internships inside and outside Oman. Then, those students would be provided with funds, mentoring, and technical skills to be able to transform their ideas into pilot projects and SMEs post-graduation. Singapore's experience seems to have been effective in changing student behaviours and making them more efficient entrepreneurs (Ho et al. 2014), which has contributed to placing Singapore among the top countries for the contributions of entrepreneurship to the economy (Ács et al. 2016). Indeed, this approach seems to have been more successful in creating an entrepreneurial culture, unlike in Oman where the EEP has not as yet made the culture more entrepreneurial. Creating this culture is crucial for increasing entrepreneurial engagement (OECD 2019a).

There is, moreover, clearly a need to address the current EEP's specific shortcomings, such as being too theoretical and short in duration, and making excessive use of foreign curricula (see discussion in Section 8.4.1). This might mean integrating entrepreneurial content into existing programmes. This model is widely used elsewhere and has shown success in the UK (Ghatora and Strutt 2017), Botswana (Swartland 2008), Finland (Seikkula-Leino 2011), and Malaysia (Hassan et al. 2017). An alternative approach attempts to combine a stand-alone course, perhaps an improved version of the EEP, while at the same time embedding other academic programmes with activities which have an entrepreneurial nature. This approach can be seen in some American HEIs (Solomon 2007; Babson College 2018).

Finally, policymakers should consider introducing entrepreneurship in primary and secondary schools through integration to other subjects or as a stand-alone subject. This could function as an introductory stage which will prepare students for more advanced EE programmes in the HE sector. It also may help convince some students who are finishing their post-basic education to decide to run a business instead of pursuing college studies, which will lower the cost of offering free HE education. In countries with different political and economic contexts, as well as different cultural and social factors, starting a business from an early age has been proven beneficial for job creation, such as in Finland (Ruskovaara et al. 2016) and in Mexico (de Lourdes Cárcamo-Solís et al. 2017).

One possible reason for the success of this type of programme is that EE requires a learning by doing process which, according to a study by Jones and Matlay (2011), suits the teaching and learning process in primary, middle, and secondary schools better than in colleges. An educational study is needed to investigate if learning by doing can improve EE delivery and what type of adaptation would be needed if Oman were to borrow these practices.

It is worth noting though that further investigation is needed to determine whether these alternative approaches would work in Oman. In countries such as the USA, with its large economy, free market, and long history of successful EE implementation, it is normal to see the implementation of different EE approaches, including various combinations. However, given that Oman's economy is much smaller and is a rentier state, combinations of approaches might not be accommodated well in its small HE sector (if this is the only sector targeted). In other words, what works in one context, within its particular configuration of institutional frameworks, is not immediately applicable to another. This study only draws attention to the existence of different approaches and their success in other contexts and raises the need for in-depth analyses to examine

whether they could work in Oman, under what conditions, and through what adjustments (as raised by this thesis in Chapter 7).

Furthermore, as mentioned before, this study identified several flaws in the EEP's implementation, some of which are related to a lack of qualified lecturers and entrepreneurship curriculum designers. In the short term, the central authority (MOHE) should conduct professional training sessions for all lecturers assigned to teach the EEP. A number of lecturers interviewed complained that they have never taught entrepreneurship before and that they need greater preparation and support to do so. They did not receive this preparation because some of these institutions (especially private institutions) are more focused on making a profit than funding training for a course imposed by the MOHE. In the long term, Oman could learn from elsewhere and start offering doctoral programmes in EE in its HEIs. A study by Kuratko (2005) contended that there is a global shortage of faculty able to teach entrepreneurship which is different from teaching management, business and similar subjects¹³⁴. There is no shortage of faculty who teach these topics, as opposed to entrepreneurship.

HE Practitioners: First, as discussed in Chapter 8, one main issue for the EEP is curriculum borrowing, which is not working well, as various students highlighted. Omani HEIs need to design their own curriculum, even if they build on knowledge from best practices (e.g., USA). The second issue is the current programme's short duration. Generally, there is a strong need to examine the structure and pattern of delivery of the programme. It could be a phased multi-level delivery that aims to generate interest and build expertise.

This issue of curriculum design and duration can be further explored through an educational study that examines pedagogical aspects. This thesis can only suggest some ideas based on the identification of these shortcomings and global best practices. For example, increasing the number of classes to more than the current schedule of once a week might give students more time to develop critical skills for starting up and running a business. Warwick University's Business School offers a module titled "Entrepreneurship & New Businesses" which requires students to attend two lectures and one seminar per week (University of Warwick 2020). An alternative would be to offer more than one course over the students' four-year period of college study. An initial course can be mandatory for all students in order to determine who is interested in entrepreneurship. Then, there should be additional advanced courses for those interested in further developing their skills and becoming entrepreneurs; a similar

¹³⁴ Kuratko (2005, p. 581) differentiates between the concept of entrepreneurship, which is "opportunity driven", and the managerial domain, which is "resource and conversation driven".

approach was introduced by the International Council for Small Businesses (International Council for Small Business 2020). In short, whilst policy borrowing is flawed, Oman needs further investigation to determine what might work to serve its needs.

Indeed, a further concern is the domination of theoretical content at the expense of practical activities in the EEP (see Chapter 7). This study suggests that there should be a balance between theory and practical elements in EE curricula. Several studies (e.g., Berbegal-Mirabent et al. 2016; Warhuus et al. 2017) have emphasised that EE programmes should be practice-based in order to develop knowledge and skills. This approach makes use of play (e.g., puzzles, business model canvas game, etc.), empathy (e.g., observation, coaching, interviewing etc.), creation (e.g., mind dumping for ideation, creating as an artist etc.), experimentation (e.g., feasibility blueprints, escalating market tests, etc.), and reflection (e.g., reflecting on entrepreneurial experiences, the dark side of entrepreneurship, etc.) (Neck et al. 2014, p. v to vi). This study recommends that the feasibility of thesis practice-base pedagogical approaches deserves further research in the context of Oman (see more suggested scenarios in Appendix 11).

Supplementary Actions (outside the HE sector): It is clear from the data that additional actions are required to complement the efforts being made within HEIs, particularly to improve the entrepreneurial infrastructure. One main concern highlighted by this thesis is the ineffective implementation of rules and regulations for the facilitation of entrepreneurship and SME start-ups development. The study suggests that the problem is not necessarily regulation, but the lack of flexibility of processes and existing complexities around access to funds for entrepreneurship activities. This calls for urgent action to ensure more facilitation, flexibility, supervision, and follow-up in implementing these policies.

Second, for entrepreneurship to develop in the way currently envisaged by the government, it is likely that there will need to be fundamental changes in the fabric of Omani society and culture. Society and culture are significant in shaping understandings, forming positive attitudes, developing skills, and changing career intentions (see Chapter 6). Despite the fact that cultural change is not easy, Oman could learn from experiences in other countries that have embedded entrepreneurship into their societies and witnessed cultural changes towards entrepreneurship activities. However, Oman needs to be cautious and endeavour to avoid strategies that might not be beneficial for its particular circumstances and time. For example, some borrowed educational policies which have worked in certain periods of time and in particular contexts (Steiner-Khamsi 2014) would not necessarily work in the twenty-first century in a rentier state like Oman (as discussed in Chapter 3, Section 3.3.4). Oman should also consider social

entrepreneurialism and try to develop business types that reflect Omani society and respond to local, community, and regional needs. Below, I present initiatives that could contribute to support current government initiatives to develop entrepreneurship in Oman:

- Families play an important role in raising children to be more independent and take calculated risks (Lee et al. 2017). Parents might be targeted for an awareness campaign on the importance of entrepreneurship to Oman's future, through national and social media, seminars, social events, etc.
- After school clubs in Oman, such as cultural and sports clubs, are present even in rural areas and could be used to promote entrepreneurship. For example, successful role models could be invited to give speeches to inspire younger generations (Entrialgo and Iglesias 2017).
- Society plays a critical role in enhancing positive attitudes. Community members with entrepreneurial expertise should encourage their counterparts. This can be done through networking (Johannisson 2017) between local entrepreneurs and members of the public who are thinking of starting a business, inviting them to observe successful businesses run by Omani entrepreneurs in their cities.
- Non-governmental Organisations (NGOs) and other civil society organisations can also contribute by promoting awareness, linking entrepreneurs, and offering free courses and training programmes for the public, particularly for women (Lenka and Agarwal 2017). In Oman, there are some active organisations such as the Omani Women Associations which are strongly supported by the government and established in all of the country's Wilayats (major cities in the nine governorates). These associations can play a role in bridging the gender gap and cultivating more interest in entrepreneurship among women. This study shows that, particularly in rural areas, the situation with women requires particular attention as conservative parental attitudes discourage their daughters from considering entrepreneurship initiatives (Chapter 7).

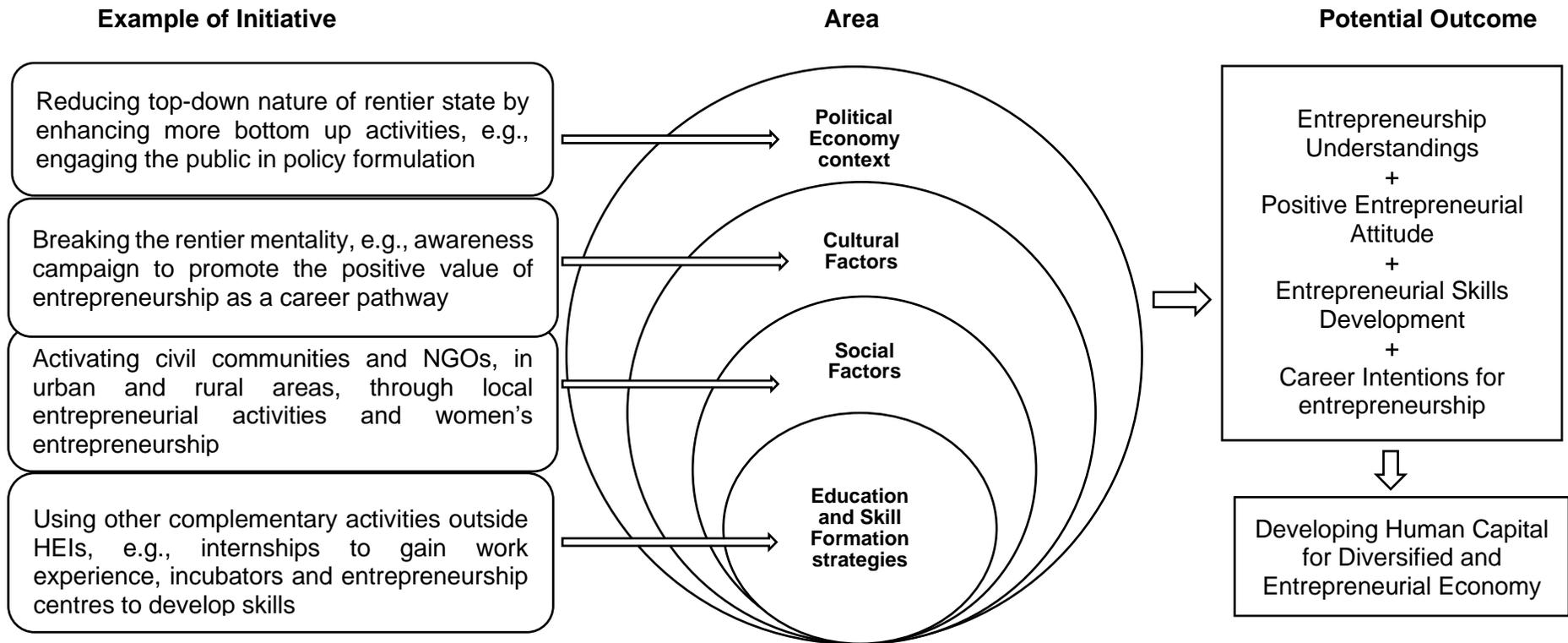
Finally, Oman should adopt an industrial strategy and strengthen its private sector technological infrastructure¹³⁵. As discussed in Chapter 6, the lack of such a strategy in the previous economic plans and visions undermines entrepreneurship growth in Oman. As seen in East Asia (Weiss 2005) and elsewhere, industrial strategies are instrumental

¹³⁵ In 2018, Oman introduced an initial industrial strategy which simply outlined the industrial sector priorities, such as developing high technology and becoming capital-intensive and resource-based. In August 2019, mechanisms and a timeframe to implement these priorities were identified (Oman Ministry of Commerce and Industry 2018).

for economic success because they link private sector and government activities and priorities and identify obstacles in establishing such linkages, thereby enabling the identification of necessary interventions to remove these obstacles (Rodrik 2004). Den Haan et al. (2017, p. 2) stated that such State's interventions in these strategies should be in form of investment in education and training, promoting R&D and knowledge spillovers and providing the necessary infrastructure.

Oman should adopt a complementary and comprehensive policy (inclusive of other factors alongside the EEP) in order to make entrepreneurship an effective contributor to economic diversification plans. Figure 9.1 below suggests a range of complementary policies based on the findings of this thesis.

Figure 9.1 Suggested Complementary Policies for Developing Entrepreneurial Skills for Economic Diversification



Source: Interview, survey and document data

Figure 9.1 above illustrates how a set of changes and policy-related initiatives from general (i.e., political economy) to specific (i.e., EEP) can be deployed to reformulate the way entrepreneurship is developed in the country. Initiating programmes (as shown in the boxes on the left) in each area would aim to generate certain outcomes, as illustrated in the figure.

9.5. Study Limitations

This section discusses the study's main shortcomings in order to put the findings of the thesis in perspective and better interpret their validity. This opens the door for a discussion on further research to address these gaps, as discussed in the following section.

A first limitation is that given that the EEP had just been introduced, it was not possible to measure its expected outcomes in this thesis. There are no data yet available showing how many EEP students chose entrepreneurship post-graduation instead of moving into other more traditional avenues of employment. These data, when collected, will give more solid findings regarding the programme's impact and outcomes. The study's survey did provide some insights, however, on the career intentions post-graduation for around 727 students across 31 HEIs, including EEP participants and non-participants¹³⁶. Then, the 32 interviewed students also expressed their intentions, which gives a snapshot of the programme's effects on student mindsets and enables a comparison between the attitudes of students who took the programme (interview data) and those who did and did not take (in the survey data). Nonetheless, this survey is not a substitute for a larger-scale evaluation. Moreover, according to Gospel et al. (2013, p. 445) the "societal significance and value" of gaining certain skills cannot be identified until they are embedded in the labour market. In other words, students who took the programme should be researched when they join the labour market, not during their studies, to identify the value of their entrepreneurial skills. Thus, this study should be complemented with studies that examine the career outcomes of EEP participants.

Second, the struggle to access top policymakers (the initial plan was to include four) in the semi-structured interviews, for the reasons outlined in Chapter 4, is a study limitation. Nonetheless, the two policymakers who agreed to be interviewed provided powerful data, compensating to some extent for the absence of additional policy-maker interviewees. In part, this is because these data were relevant and varied, given the profile of the policy-makers involved in the study. One policymaker came from the education sector (and is a member of the EEP establishment committee). This policy-

¹³⁶ As explained in Chapter 4, due to the low response rate to the survey from students who took the EEP, these data were excluded from the analysis.

maker could fully reflect on the EEP since he was involved in the process from the start until it was fully initiated¹³⁷. The other policymaker came from outside the education sector: the SCP which is the top government entity for economic planning (headed by the Sultan himself). This interviewee was able to reflect on the broader context of Oman's economic goals. Therefore, both policymakers were very relevant to the study's main enquiry (entrepreneurship and EE for economic diversification) and gave thorough feedback and insights that I believe no one else could provide.

The study would also have benefitted from interviewing more than ten entrepreneurs. This was not possible due to access difficulties and this study's time restrictions. Speaking to a larger number of entrepreneurs would have provided more first-hand experiences of entrepreneurship in Oman. Although the study's main focus was not the examination of entrepreneur perspectives of the labour market (see the thesis research questions), studying this topic would have offered additional valuable insight on what may or may not work to develop entrepreneurship in the Omani context. Nevertheless, nine of the interviewed entrepreneurs were highly educated (6 have a BA, two have an MA and one has a PhD degree) and were able to reflect on the EEP and suggest improvements.

Finally, whilst the findings provide strong indications of the issues faced (and shared) by rentier states more generally (e.g. their reliance on natural resources, authoritarianism, transition), there are significant differences between rentier states, which means that their experiences in entrepreneurialism development are not directly comparable. Similarly, the experience of liberal market or developmental states can be quite different. For example, in terms of entrepreneurial infrastructure, the UAE has successful environmental and governmental support (see more Gupta and Mirchandani 2018), which can be a complementary factor for entrepreneurship-developing educational initiatives, unlike in Oman where the lack of such an environment hinders the EEP (see Chapter 7). In another example, both the UAE and Qatar have autocratic governments which have adopted flexible rules and regulations and have promoted greater entrepreneurship growth than other Gulf states (Ennis 2018). Also, in terms of its politics, Kuwait has more democratic practices (e.g., the powerful Majlis Umma legislative council) than other Gulf states, including Oman (Mainuddin 2016), which has allowed for more public engagement on various initiatives including educational matters.

¹³⁷ Bias here is difficult to avoid given that he is one of the policy's creators and is most likely positively promoting his own project. However, interviews of other HEI managers who discussed policy flows could limit the effect of this bias because they had some views which contrasted with those of the policy's creators.

9.6. Recommendations for Future Research

This section recommends areas to fill in the gaps which this study might have not addressed due to time and resource limitations and areas that the research process has raised as potentially relevant topics to generate greater understandings and knowledge related to this study's main enquiry. As discussed in Section 9.3, this study focuses on skill formation in rentier state contexts, an underreached area. In particular, this study advocates for a comprehensive review of rentier states' political economy of skill formation (and its relevant cultural and social context) that shape the EE as part of skill formation outcomes. Understanding each country's contextual specificities is crucial in the process of developing effective strategies for skills development to contribute to economic diversification.

Furthermore, Section 9.3 discusses a type of education (e.g., EE) for the focused production of human capital for economic growth. Whilst recognising the difficulties of understanding the links between skills and economic growth (see Wolf, 2004), future research might focus on investment in particular disciplines or subjects (e.g. STEM, entrepreneurship, humanities) and their potential for advancing individual benefits and the national economy. Although this study does not examine the individual returns derived from participation in the EEP, a study by Van der Sluis et al. (2008) which analysed 20 studies found that entrepreneurs have higher earnings than company employees in the USA, but they are slightly lower in Europe. A similar study examining entrepreneurs' earnings in rentier states, particularly those who have been through an entrepreneurial education programme, will add a valuable contribution to the literature.

Another important area that this sociological study could not examine was the pedagogical aspect of the EEP. By pedagogical, I mean the teaching and learning methods used by lecturers to deliver the content, particularly from an academic and technical perspective. This study was only able to collect the overall views of stakeholders regarding the ability of an EE policy to deliver entrepreneurial skills for economic diversification without digging deep into observing or testing the methods of teaching, the academic performance of learners, or the suitability of delivery techniques. A specialised "educational" study comparing the effectiveness of current pedagogical practices across not only Omani HEIs but also with international best practices would complement the policy study, suggesting more practical solutions for students and lecturers.

The nature and extent of the EEP's outcomes is also worth exploring. The lack of these outcomes makes it hard to determine the programme's effectiveness. This information deficit is not only a limitation of this study but also of the literature on entrepreneurship

more broadly (Duval-Couetil 2013; Walter and Block 2016). According to Duval-Couetil (2013), the literature has not paid much attention to investigating outcomes of EE, and she proposes practical suggestions for HE lecturers and managers to achieve progress in terms of the investigation of outcomes.

Furthermore, this study has opened up questions on the value of a policy which offers a national educational programme to develop a particular set of entrepreneurship related skills and diversify the economy. Indeed, research could be conducted on other programmes or policies that offer similar approaches to the EEP (mandatory, centrally imposed by government, implemented differently by HEIs). The purpose is to undertake an empirical study to examine the effectiveness of such educational policies or programmes, in terms of implementation, stakeholder expectations, and the potential to achieve national aims. For example, the MOHE has recently been working to direct HEIs to offer courses on logistics, maritime studies, tourism, and innovation. Similar to entrepreneurship, these subjects have been identified as key drivers for future economic diversification in Oman (Tanfeedh 2017).

Moreover, given that the ability to generalise the results of this study to other Gulf rentier states is limited, similar studies can be conducted to examine the potential of implementing such policies for economic diversification in those contexts. For example, Qatar has also implemented entrepreneurship education programmes in its key HEIs for the purpose of economic diversification (Gangi 2017). These comparative studies would help to advance research in this area and suggest more solid solutions from different perspectives and contexts.

Finally, as an insider working in The Research Council, the highest governmental authority that is obliged not only to promote and fund research activities at the national level in Oman but to also assist the State in identifying Oman's current and future national priorities, I can say this study has been conducted at a crucial time. At present, there has been a strong drive from all parts of government to make entrepreneurship a key contributor to economic diversification. The findings and recommendations in this study can be beneficial not only for education policymakers but also for different organisations (e.g., Supreme Council for Planning and General Authority for SMEs Development), community members, NGOs and individuals.

Appendices

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Appendix 1: Participant Information Sheet (English)

Title of Study: Integrating EE in the Omani Higher Education Sector as Part of Skill Formation Strategies to Contribute to Economic Diversification in Oman

You are being invited to take part in a research study. Before you decide whether 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 and discuss it with others if you wish.

My name is Issa Al-Shabibi. I am a PhD student at Cardiff University. Thank you for reading this.

1. What is the purpose of this research?

This study is about skill formation strategies in Oman and the government's desire to develop entrepreneurial attitudes and skills. These strategies are deemed to contribute to the development of the private sector and private enterprise and in turn enhance the aggregate efforts to diversify the economy. The study focuses on one higher education initiative, that is, a recently introduced Entrepreneurship Education Programme (EEP), which is part of a broader skill formation strategy to support economic diversification in Oman. This programme provides a 'lens' through which to explore 'stakeholder' understandings of entrepreneurialism and to assess the possibilities for its growth. The first main aim of the study is to explore understandings of entrepreneurialism and the development of entrepreneurialism as a skill formation strategy in the context of a rentier state economy. The second main aim is to examine to what extent might entrepreneurial education shape students' post-graduation intentions and attitudes in the context of rentier states.

2. Why have I been invited?

You have been invited because you are a stakeholder who belongs to one these sampling groups:

- Undergraduate students in Omani higher education institutes
- Omani higher education institutes managers
- Policymakers/planners in Oman's Ministry of Higher Education
- Lectures in Omani higher education institutes
- Entrepreneurs in Omani small and medium-sized enterprises (SMEs)

3. Do I have to take part?

No, it is up to you to decide whether to take part. If you do decide to take part, I will discuss the study with you and ask you to sign a consent form. If you decide not to take part, you do not have to explain your reasons.

You are free to withdraw your consent at any time, without giving a reason, even after signing the consent form.

4. Will I be paid anything for taking part?

No, you should understand that your participation is voluntary and that you will not benefit financially from this participation.

5. What are the possible benefits of taking part?

There will be no direct advantages or benefits to you from taking part, but your contribution will be valuable to my research and to the future of entrepreneurialism in Oman.

6. Will my taking part in this study be kept confidential?

All information collected during the study will be kept strictly confidential in accordance with the Data Protection Act of 1998. Your information will not be passed onto anyone and your interview data will be assigned an anonymous identification code. You will not be identified in any published study results.

7. What happens to my data at the end of the study?

Your data will only be stored for the duration of this study and up to five years after the study. Data will either be used up during the study or disposed of according to locally approved procedures at the end of the study.

8. What will happen to the results of the study?

It is my intention to publish the results of this study in academic journals and present findings at conferences. Participants will not be identified in any report, publication or presentation.

9. Who is organising and funding this research?

The research is undertaken as part of a PhD thesis at Cardiff University. The research is currently funded by the government of Oman.

10. Further information and contact details

Should you have any questions relating to this study, you may contact me during normal working hours:

My Oman phone number is 0096899235919, my UK phone number is 0447460680043, my email address is: issashabibi@hotmail.com

I would like to thank you for considering taking part in this study. If you decide to participate you will be given a copy of the information sheet and a signed consent form to keep.

Participant Information Sheet (Arabic)

عنوان الدراسة: دمج تعليم ريادة الأعمال في قطاع التعليم العالي العماني كجزء من استراتيجيات تكوين المهارات للمساهمة في التنوع الاقتصادي في عمان

أنت مدعو للمشاركة في دراسة بحثية. قبل أن تقر ما إذا كنت ستشارك أم لا ، من المهم لك أن تفهم سبب إجراء البحث وما الذي سيتضمنه. يرجى قضاء بعض الوقت لقراءة المعلومات التالية بعناية ومناقشتها مع الآخرين إذا كنت ترغب في ذلك. اسمي عيسى الشبيبي. أنا طالب دكتوراه في جامعة كارديف. شكرا لقراءتك هذا.

1. ما هو الغرض من هذا البحث؟

تتناول هذه الدراسة استراتيجيات تكوين المهارات في عمان ، ورغبة الحكومة في تطوير مواقف ومهارات تنظيم المشاريع. تُعتبر هذه الاستراتيجيات بمثابة إسهام في تطوير القطاع الخاص والمؤسسات الخاصة وبالتالي تعزيز الجهود الكلية للتنوع الاقتصادي. تركز الدراسة على مبادرة واحدة للتعليم العالي ، وهي برنامج تعليم ريادة الأعمال الذي تم تقديمه مؤخرًا ، والذي يعد جزءًا من استراتيجية أوسع لتكوين المهارات لدعم التنوع الاقتصادي في عمان. يوفر هذا البرنامج "عدسة" يمكن من خلالها استكشاف "فهم أصحاب المصلحة" لريادة الأعمال وتقييم إمكانات نموها. الهدف الرئيسي الأول من هذه الدراسة هو استكشاف فهم روح المبادرة ، وتطوير روح المبادرة كاستراتيجية لتشكيل المهارات ، في سياق اقتصاد دولة ريعية. الهدف الرئيسي الثاني هو دراسة إلى أي مدى يمكن أن يشكل التعليم الريادي نوايا ومواقف الطلاب بعد التخرج في سياق الدول الريعية.

2. لماذا دعيت لي؟

تمت دعوتك لأنك صاحب مصلحة ينتمي إلى إحدى مجموعات أخذ العينات هذه:

- طلاب المرحلة الجامعية الأولى في معاهد التعليم العالي العمانية
- مدراء معاهد التعليم العالي العمانية
- واضعي السياسات / المخططين في وزارة التعليم العالي العمانية
- محاضرات في معاهد التعليم العالي العمانية
- رواد الأعمال في قطاع الشركات الصغيرة والمتوسطة العماني

3. هل يجب علي المشاركة؟

لا ، الأمر متروك لك لتقرر ما إذا كنت ستشارك أم لا. إذا قررت المشاركة ، فسندناقش الدراسة معك ونطلب منك التوقيع على نموذج موافقة. إذا قررت عدم المشاركة ، فلا يلزمك توضيح أسبابك.

أنت حر في سحب موافقتك في أي وقت ، دون إبداء سبب ، حتى بعد التوقيع على نموذج الموافقة.

4. هل سأدفع أي شيء مقابل المشاركة؟

لا ، يجب أن تفهم أن مشاركتك طوعية وأنت لن تستفيد مالياً من هذه المشاركة.

5. ما هي الفوائد المحتملة للمشاركة؟

لن تكون هناك مزايا أو فوائد مباشرة لك من المشاركة ، ولكن مساهمتك ستكون ذات قيمة بالنسبة لبحثي وفي مستقبل ريادة الأعمال في سلطنة عمان.

6. هل تبقى مشاركتي في هذه الدراسة سرية؟

سيتم الاحتفاظ بجميع المعلومات التي تم جمعها خلال الدراسة بسرية تامة وفقاً لقانون حماية البيانات لعام 1998. ولن يتم نقل معلوماتك إلى أي شخص وسيتم تخصيص بيانات هوية مجهولة الهوية لمقابلة بياناتك. لن يتم التعرف عليك في أي نتائج دراسة منشورة.

7. ماذا يحدث لبياناتي في نهاية الدراسة؟

سيتم تخزين البيانات الخاصة بك فقط لمدة هذه الدراسة وحتى خمس سنوات بعد الدراسة. سيتم استخدام البيانات أثناء الدراسة أو التخلص منها وفقاً للإجراءات المعتمدة محلياً في نهاية الدراسة.

8. ماذا سيحدث لنتائج الدراسة؟

أنوي نشر نتائج هذه الدراسة في المجلات الأكاديمية وعرض النتائج في المؤتمرات. لن يتم تحديد المشاركين في أي تقرير أو منشور أو عرض تقديمي.

9. من الذي ينظم ويمول هذا البحث؟

يجري البحث كجزء من أطروحة الدكتوراه في جامعة كارديف. يتم تمويل البحث حالياً من قبل حكومة عمان.

10. مزيد من المعلومات وتفاصيل الاتصال

إذا كان لديك أي أسئلة تتعلق بهذه الدراسة ، يمكنك الاتصال بي خلال ساعات العمل العادية:

رقم هاتفي العماني هو 0096899235919 ، رقم هاتفي في المملكة المتحدة هو 0447460680043 ، عنوان بريدي

الإلكتروني هو: issashabibi@hotmail.com

نود أن نشكركم على قراءة بيانات المشاركة في هذه الدراسة. إذا قررت المشاركة ، فسوف تحصل على نسخة من ورقة المعلومات ونموذج الموافقة الموقع عليها.

Appendix 2: Participant Consent Form (English)

Participant ID	Do not include
Number	box for anonymised



Consent Form

Title of study: **Integrating EE in Omani Higher Education Sector as Part of Skill Formation Strategies to Contribute to Economic Diversification in Oman** REC/SREC reference and committee: **[Insert REC/SREC reference and committee]**

Name of PhD student: **Issa Al-Shabibi**

**Please
initial box**

I confirm that I have read and understood the information sheet dated [insert date of PIS] version [insert version number of PIS] for the above study and have had the opportunity to ask questions and these have been answered satisfactorily	
I understand that my participation is voluntary, and I am free to withdraw at any time without giving a reason	
I agree to take part in the study	

Name of participant (print) Date Signature

Name of person taking consent Date Signature
(print)

THANK YOU FOR PARTICIPATING IN OUR RESEARCH
YOU WILL BE GIVEN A COPY OF THIS CONSENT FORM TO KEEP

Consent Form (Arabic)

عنوان الدراسة: دمج تعليم ريادة الأعمال في قطاع التعليم العالي العماني كجزء من استراتيجيات تكوين المهارات للمساهمة في التنويع الاقتصادي في سلطنة عمان المرجع / لجنة.

اسم طالب الدكتوراه: عيسى الشبيبي

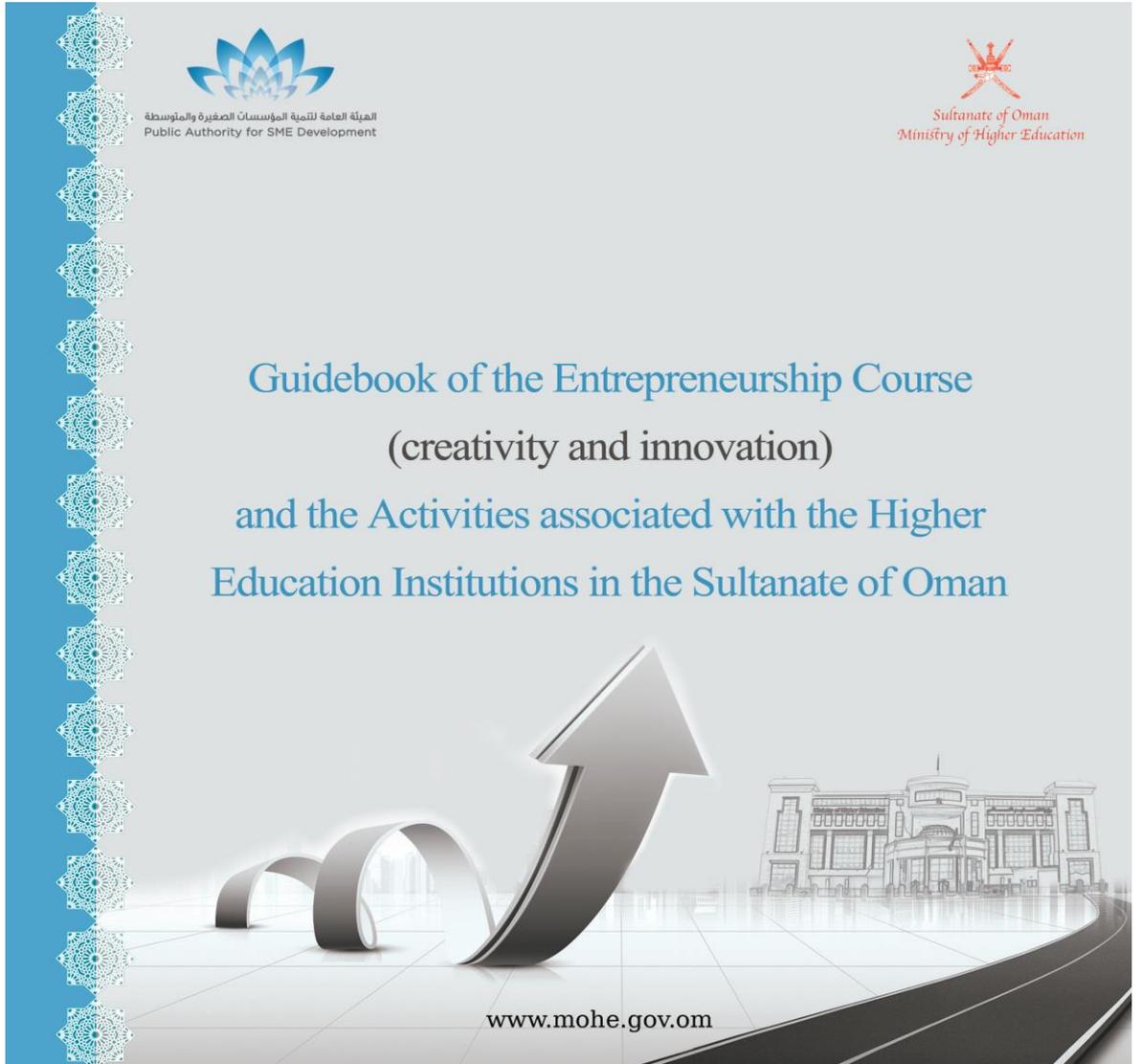
	أؤكد أنني قد قرأت وفهمت ورقة المعلومات المؤرخة للدراسة اعلاه وأتيتحت لي الفرصة لطرح الأسئلة وتمت الإجابة عليها بشكل مرض
	أدرك أن مشاركتي طوعية ولدي الحرية في الانسحاب في أي وقت دون إبداء سبب
	أوافق على المشاركة في هذه الدراسة

التوقيع

التاريخ

إسم المشارك

Appendix 3: MOHE Guidebook Objectives and Collaborative Institutions



3. Learning Objectives

The course is set with a number of objectives, which need to be met to ensure the quality of the offering these objectives are:

- Develop a mindset of appreciation of business venturing and the entrepreneurial process, its risks and rewards.
- Develop an appreciation of the impact of entrepreneurship and innovation on the local and global economies.
- Develop a clear and structured understanding of a business plan.
- Understand the support systems available to new business ventures in Oman.
- Recognize, engage and interact with entrepreneurs within the local community.

4. Learning Outcomes

Upon completion of the course, students should be able to

- Develop some basic skills, understanding and appreciation of entrepreneurship and business venturing.
- Develop a clear appreciation of innovation and entrepreneurship and their impact on the economy
- Identify the support systems available to new business ventures.
- Articulate and write up a basic Business Plan.
- Appreciate the benefits and risks involved in starting up a new business.

Extracurricular Activities

8.General objectives

Presenting a proposal for conducting activities at higher education institutions in the Sultanate of Oman which will provide:

- o The type of activities and the duration of each
- o The objective of each activity
- o Required resources for each activity
- o Expected outcome for each activity
- o Methodology
- o Supporting organization

9.Objectives

These activities aim at complementing the efforts of the private sector in encouraging Omani youth to be self-dependent and eliminate the fear of managing their own enterprises through

- o Encouraging the culture of entrepreneurship
- o Developing the entrepreneurial skills
- o Encouraging creative thinking amongst students
- o Developing the managerial and financial skills amongst students
- o Preparing students to join the workforce and equipping them with the necessary skills, competences, ethics and knowledge about their rights and responsibilities

Proposal Methodology

1. Curriculum

The team members followed a systematic approach whilst developing the course proposal. The sub team responsible for the academic content utilized a number of tools such as:

- Review of background information on entrepreneurship education. This was to contextualize the course, its objectives and learning outcomes.
- Researching existing entrepreneurship programs and courses. This provides a broad spectrum of curricula, course structure and content. The scope of programs

included various leading institutions across four main regions: Oman and the Middle East, United Kingdom, United States and Australia. Some of the institutions included are listed below:

- o Sultan Qaboos University, Sultanate of Oman
- o Colleges of Applied Sciences, Sultanate of Oman
- o Babson College MA, United States
- o Massachusetts Institute of Technology, MA, United States
- o Swinburne University, Melbourne, Australia
- o University Of East Anglia, United Kingdom
- o Other relevant programs
- Review of reports presented by Ministry of Higher Education regarding Entrepreneurial Education.
- Academic and practitioners peer review of proposal.

is based on several initiatives executed by many institutions around the world, to name few:

- Sultan Qaboos University
- Higher College of Technology
- Several universities in the Kingdom of Jordan
- MIT (United States)
- Competent institutions in Europe and North America
- Some local initiatives

Appendix 4: Pilot Survey

This survey encompasses (27) questions/items. The estimated time to complete it is (15) minutes.

The purpose of the following questions (1-14) is to collect factual statistics and information:

Table (1) Survey Items for objective answers

The parts highlighted in yellow were added to or modified in the final survey based on this pilot survey data analysis. This applies for both the Arabic and English versions.

Objective	Question/Item	How survey will be used in analysis
Name of University/College	What University/College are you affiliated with now? _____	The survey will be spread widely across many HEIs. Knowing which HEI a respondent is from is for the measurements of (1) identifying the status of HEI (2) comparing private and public HEIs
Gender	Are you: - Male - Female	Knowing the gender is important for comparing male and female responses
Nationality	Are you of Omani Nationality: - Yes - No	Nationality is one eligibility criterion for student participation
Current Academic Semester	Which academic semester of your study are you in now? - First - Second - Third - Fourth - Fifth - Sixth - Seventh - Final	Identifying the amount of time elapsed since programme completion filled will indicate the influence of time on changing students' intentions
Academic semester when took EE programme	In which academic semester did you take the EE programme? - First - Second - Third - Fourth - Fifth - Sixth - Seventh - Final	
Discipline of study	What is your current major of study? _____	Comparing perceptions of vocational and non-vocational majors
Reasons for choosing your major of study	Please tick reason for choosing your current major of study (you may tick more than one): () Income () Enjoyment	Identifying motives for choosing certain majors can be indicative for intended future career pathway before taking the programme

	<input type="checkbox"/> Inspired by role model (parents, public figure) <input type="checkbox"/> Childhood dream <input type="checkbox"/> Friends/relative influence <input type="checkbox"/> Only major for which I eligible due to my post-secondary marks <input type="checkbox"/> Randomly chosen <input type="checkbox"/> Others, please specify: <hr/>	
Rationale for taking the EE programme	Have you taken the EEP as: - compulsory - elective	Choosing it as elective might indicate a strong interest in entrepreneurship. Knowing why will also give a more specific rationale for this intention.
	If you have taken it as elective, could you specify why (you may tick more than one): <input type="checkbox"/> Curious to learn about entrepreneurship <input type="checkbox"/> Learning how to plan a business <input type="checkbox"/> Learning how to start-up a business <input type="checkbox"/> Been inspired to be an entrepreneur <input type="checkbox"/> Interested in working in the private sector <input type="checkbox"/> Interested in working in public sector <input type="checkbox"/> Others, please specify: <hr/>	
Understanding of entrepreneurialism from taking the programme	Please order the skills that you have gained from the programme according to their relevance to your understanding of entrepreneurship (you can check more than one): <input type="checkbox"/> Developing a business plan <input type="checkbox"/> Steps for starting an SME <input type="checkbox"/> Managerial skills for running an SME <input type="checkbox"/> Financial skills for running an SME <input type="checkbox"/> Becoming creative (creativity means the ability to form something new and valuable) <input type="checkbox"/> Becoming Innovative (innovation means applying new ideas or methods for better solutions)	This will measure student understandings of entrepreneurship based on the skills that they have gained from taking the programme
	Please order the information that you have gained from the programme according to their relevance to how you understand entrepreneurship: <input type="checkbox"/> The meaning of entrepreneurship <input type="checkbox"/> Roles and Regulations of promoting entrepreneurship and SMEs <input type="checkbox"/> Public financial aid for starting-up an SME <input type="checkbox"/> Private financial aid for starting-up an SME	

	() Available work opportunities in the private sector	
General understanding of entrepreneurialism	Please tick what comes first in your mind when you hear the word “entrepreneurship or entrepreneur” (you may tick more than one): <input type="checkbox"/> Owning or running a business <input type="checkbox"/> Inventing something (e.g., an electronic device) <input type="checkbox"/> Being innovative (innovation means applying new ideas or methods for better solutions) <input type="checkbox"/> Being creative (creativity means the ability to form something new and valuable) <input type="checkbox"/> Others, please specify: _____	This can be explored with prompts instead of statements, e.g., by displaying pictures of small businesses, inventions, creative work, etc. It will measure the following general various understandings of entrepreneurialism
Future career intention	Please tick your most preferred sector which you intend to join when you graduate: <input type="checkbox"/> Public sector <input type="checkbox"/> Private sector <input type="checkbox"/> Working in someone else business/company (e.g., family/friend/relative) <input type="checkbox"/> Starting-up own business <input type="checkbox"/> Co-owning a business with someone else (family/friend/relative) <input type="checkbox"/> Not sure yet <input type="checkbox"/> Others, please specify _____	Statistics of post-graduation intentions after taking the programme and the reasons for that intention This will measure the programme’s as a skill formation strategy to changing student intentions in contrast with (and/or alongside) other factors. If students indicate that they are inspired by the programme it will provide statistical evidence that entrepreneurship can be taught (the argument of whether entrepreneurship is taught or innate). It will also indicate the value of teaching the programme and hence the importance of investing in education (human capital theory) to the economy.
Reasons for these intentions	Please tick the reasons for choosing that sector (you may choose more than one): <input type="checkbox"/> Inspired by the programme <input type="checkbox"/> Income <input type="checkbox"/> Personal interest <input type="checkbox"/> Attractive retirement plan <input type="checkbox"/> Flexibility of work <input type="checkbox"/> Professional Development <input type="checkbox"/> Promotion opportunity <input type="checkbox"/> Closeness to residence <input type="checkbox"/> Not sure yet <input type="checkbox"/> Others, please specify: _____	

The above factual statistics will inform the interview schedules in various ways. For example, they will give a general understanding of entrepreneurialism and general aspects of the graduates’ intentions with explanations for them. In addition, they will produce comparative data between different genders and parents professional and education backgrounds, etc.

The following questions (15-27) measure attitudes/opinions on a Likert Scale of 5 (strongly agree, agree, not sure, disagree, strongly disagree). These questions cannot be validated as they have no right or wrong answer:

Table (2): Survey Items for Subjective Answers

Objective	Question/Item	How will be used in analysis
Perception of the programme's potential as a skill formation strategy for spreading awareness and knowledge	I found the programme "encouraging" through promoting awareness about entrepreneurship and SMEs.	Measuring attitudes about the programme's potential (as a formal education) to impart knowledge
In generating skills	I found the programme "empowering" through creating entrepreneurial skills.	Measuring attitudes about the programme's potential in generating skills
In providing experience	I found the programme "excelled" by providing first-hand experience of starting-up a business.	Measuring attitudes about the programme's potential to provide experience
In inspiring values	I found the programme "inspired" me to become an entrepreneur.	Measuring attitudes about the programme potential in inspiring values
In changing mindsets	Taking the programme made me consider becoming an entrepreneur.	Measuring attitudes about the programme's potential in changing mindsets
The above measurements will inform the interview schedules to address the research question of the potential of the programme as a skill formation strategy to changing intentions. This will widely contribute to the literature of whether entrepreneurship can be taught by formal education (or is innate), as well as examine the importance of investing in education to contribute to an economic transformation; in Oman's case, economic diversification.		
Perception on whether entrepreneurialism fits into wider economic goals and entrepreneurship's contribution to economic diversification	Overall, I realise the importance of SMEs to Oman's rentier state* economy. * Rentier states are nations for which energy revenues are the country's main national income .	These will measure attitudes of the following: - broader governmental economic goals - entrepreneurship's contribution to broader governmental goals - Importance of SMEs to the economy - Importance of SMEs for creating private sector jobs
	Overall, I believe having more Omani entrepreneurs in Oman will strengthen the private sector.	
	I think starting up more SMEs will create more jobs for Omanis in the private sector in Oman	

<p>The above measurements will inform the interview schedules which will address the research questions that seek to understand entrepreneurialism in rentier state. This will broadly contribute to the literature of the importance of entrepreneurship and SMEs for national economies – in Oman’s case, a rentier state economy.</p>		
<p>Perception of the entrepreneurial environment</p>	<p>Overall, I think it is easy to start-up a business in Oman.</p>	<p>Measuring attitudes about the entrepreneurial environment in Oman</p>
	<p>The rules and regulations are encouraging for start-ups</p>	
<p>Perception of cultural values (including religious) as part of the entrepreneurial environment</p>	<p>Having more SMEs does not conflict with Omani cultural values.</p>	<p>Measuring attitudes of cultural values</p>
	<p>Being an entrepreneur does not conflict with my religious beliefs.</p>	
<p>Perception of social status as part of the entrepreneurial environment</p>	<p>In general, being an entrepreneur does not undervalue my status in the society.</p>	<p>Measuring attitudes about social status</p>
	<p>Opening a small business such as a shop or a café does not undermine my social image.</p>	<p>Measuring attitudes about low status work</p>
<p>The above measurements will set the scene for interview questions to identify the entrepreneurial environment. This will contribute to the literature of the implications (of Oman, a rentier state and an Islamic country with monarchic government) of generating entrepreneurial skills for enhancing the entrepreneurial environment.</p>		

Appendix 5: The Final Survey (English)

English Version		
Section 1: YOU		
	Question/Item	How it will be used in analysis
1	What University/College are you affiliated with now? _____	
2	Are you: - Male - Female	
3	Are you of Omani nationality: - Yes - No	
Section 2: YOUR MAJOR		
4	What is your current major? _____	Comparing perceptions of vocational and non-vocational disciplines
5	Please tick reason for choosing your current major (you may tick more than one): () Income () Enjoyment () Following role model (parents, public figure) () Childhood dream () Friends/relative influence () Only major for which I was eligible due to my post-secondary marks () Randomly chosen () others, please specify: _____	Identifying motives for choosing certain majors can be indicative for one's intended career pathway before taking the programme
6	What is your current academic semester? - First - Second - Third - Fourth - Fifth - Sixth - Seventh - Final	Identifying the amount of time elapsed since taking/completing the programme will indicate the influence of time on changing student intentions
Section 3: CAREER		
7	Please tick your most preferred sector which you intend to join when you graduate: () Public sector () Private sector () Working in someone else business/company (e.g., family/friend/relative) () Starting-up own business () Co-owning a business with someone else (family/friend/relative) () Not sure yet () Others, please specify _____	Statistics of post-graduation intentions after taking the programme and the reasons for them This will measure the potential of the programme as a skill formation strategy in changing student intentions in contrast with (and/or alongside) other factors. If students indicate that they are inspired by the programme it will provide statistical evidence that entrepreneurship can be taught (the argument of whether entrepreneurship is taught or innate). It will also indicate the value of providing the programme and hence

8	<p>Please tick the reasons for choosing that sector (you may choose more than one):</p> <p><input type="checkbox"/> Inspired by the programme</p> <p><input type="checkbox"/> Income</p> <p><input type="checkbox"/> Personal interest</p> <p><input type="checkbox"/> Attractive retirement plan</p> <p><input type="checkbox"/> Flexibility of work</p> <p><input type="checkbox"/> Professional Development</p> <p><input type="checkbox"/> Promotion opportunity</p> <p><input type="checkbox"/> Closeness to residence</p> <p><input type="checkbox"/> Not sure yet</p> <p><input type="checkbox"/> Others, please specify: _____</p>	the importance of investing in education (human capital theory) to the economy.
<p>Section 4: General Understanding of entrepreneurialism</p>		
9	<p>Please tick what first comes into your mind when you hear the word “entrepreneurship or entrepreneur” (you may tick more than one):</p> <p><input type="checkbox"/> Owning or running a business</p> <p><input type="checkbox"/> Inventing something (e.g., an electronic device)</p> <p><input type="checkbox"/> Being innovative (innovation means applying new ideas or methods for better solutions)</p> <p><input type="checkbox"/> Being creative (creativity means the ability to develop something new and valuable)</p> <p><input type="checkbox"/> Others, please specify: _____</p>	This can be explored with prompts instead of statements, e.g., by displaying pictures of small business, inventions, creative work, etc. It will measure the general understandings of entrepreneurialism
<p>Section 5: Entrepreneurialism’s contribution to economic diversification</p> <p>Please express your views in a Likert Scale (strongly agree, agree, not sure, disagree, strongly disagree)</p>		
10	Overall, I realise the importance of SMEs to Oman’s economy.	<p>These will measure attitudes about the following:</p> <ul style="list-style-type: none"> - broader governmental economic goals - entrepreneurship’s contribution to broader governmental goals - Importance of SMEs to the economy <p>Importance of SMEs for creating jobs in private sector</p>
11	Overall, I believe having more Omani entrepreneurs in Oman will strengthen the private sector.	
12	I think starting up more SMEs will create more jobs for Omanis in the private sector.	
<p>Section 6: Entrepreneurial Environment in Oman</p> <p>Please express your views in a Likert Scale (strongly agree, agree, not sure, disagree, strongly disagree)</p>		
13	Overall, I think it is easy to start-up a business in Oman.	Measuring attitudes regarding the entrepreneurial environment in Oman

15	Business regulations in Oman encourage business start-ups.	
16	Having more SMEs does not conflict with Omani cultural values.	Measuring attitudes regarding cultural values
17	Being an entrepreneur does not conflict with my religious beliefs.	Measuring attitudes regarding religious beliefs
18	In general, being an entrepreneur does not devalue my status in the society.	Measuring attitudes regarding social status
19	Opening a small business such as a shop or a café does not undermine my social standing	Measuring attitudes regarding low status work
The following Sections (7-8) will be completed by students who have taken the programme only		
Section 7: EE		
	Question/Item	How will be used in analysis
20	Have you taken the EE programme as? - Compulsory - Elective	Voluntarily taking it might indicate a strong interest in entrepreneurship. Knowing why will provide a more specific rationale for this intention.
21	If you have taken it as an elective, could you specify why (you may tick more than one): <input type="checkbox"/> Curious to learn about entrepreneurship <input type="checkbox"/> Learn how to plan a business <input type="checkbox"/> Learn how to start-up a business <input type="checkbox"/> Be inspired to be an entrepreneur <input type="checkbox"/> Interested in working in the private sector <input type="checkbox"/> Interested in working in public sector <input type="checkbox"/> Others, please specify: _____	
22	In which academic semester did you the EE programme? - First - Second - Third - Fourth - Fifth - Sixth - Seventh - Final	Identifying the amount of time elapsed since starting the programme to the time the survey is filled will indicate the influence of time factor on changing students' intention

23	<p>Please order the skills that you have gained from the programme according to their relevance to your understanding of entrepreneurship (you can check more than one):</p> <ul style="list-style-type: none"> () Developing a business plan () Steps of starting an SME () Managerial skills for running an SME () Financial skills for running an SME () Becoming creative (creativity means the ability to form something new and valuable) () Becoming Innovative (innovation means applying new ideas or methods for better solutions) 	This will measure student understandings of entrepreneurship based on the skills gained from taking the programme
24	<p>Please order the information that you have gained from the programme according to their relevance to how you understand entrepreneurship:</p> <ul style="list-style-type: none"> () The meaning of entrepreneurship () Roles and Regulations of promoting entrepreneurship and SMEs () Public financial aids for starting-up an SME () Private financial aids for starting-up an SME () Available work opportunities in the private sector 	This will measure student understandings of entrepreneurship based on the knowledge gained from taking the programme
	Question/Item	How it will be used in analysis
25	I found the programme “encouraging” through its promotion of awareness of entrepreneurship and SMEs	Measuring attitudes about the programme’s potential (as formal education) to impart knowledge
26	I found the programme “empowering” by creating entrepreneurial skills .	Measuring attitudes about the programme’s potential to generate skills
27	I found the programme provides first-hand experience in starting-up a business.	Measuring attitudes about the programme’s potential to provide experience
28	I found the programme “inspired” me to become an entrepreneur.	Measuring attitudes about the programme’s potential to inspire values.
29	Taking the programme made me consider becoming an entrepreneur.	Measuring attitudes of the programme’s potential to change mindsets.

The Final Survey (Arabic)

الاستبانة لطلبة التعليم العالي بسلطنة عمان
القسم 1: المعلومات الشخصية
ما هي الجامعة الكلية التي تنتمي لها؟
هل انت: -ذكر -انثى
هل انت عماني الجنسية؟ نعم لا
القسم 2: التخصص
ما هو تخصصك الدراسي الحالي:
الرجاء وضع علامة على السبب الذي جعلك تختار هذا التخصص الدراسي (يمكنك وضع علامة على أكثر من سبب) () الدخل المالي () المتعة () الاقتداء بأحد ما (شخصية معروفة أو أحد الوالدين) () حلم الطفولة () التأثير بأحد الأقارب أو الأصدقاء () كان التخصص الوحيد الذي يناسب المعدل الذي حصلت عليه في الدبلوم العام () اختيار عشوائي
في اي فصل دراسي انت الان:
القسم 3: المسار المهني
الرجاء وضع علامة على القطاع الذي تنوي الانخراط فيه بعد التخرج: () القطاع العام (الحكومي) () القطاع الخاص () العمل في شركة شخص مقرب (صديق او فرد من العائلة أو الأقارب) () البدء في نشاط تجاري خاصة بي () الشراكة في نشاط تجاري مع شخص مقرب (صديق او فرد من العائلة أو الأقارب) () لست متأكد بعد
الرجاء وضع علامة على السبب لاختيارك الانضمام إلى هذا القطاع (يمكنك وضع علامة على أكثر من سبب) () الاستلهم من دراسة منهج ريادة الأعمال () الدخل المالي () رغبة شخصية

<p>() خطة تقاعد مغرية</p> <p>() المرونة في ساعات العمل</p> <p>() التطوير المهني</p> <p>() فرص الترقى</p> <p>() القرب من مقر السكن</p> <p>() لست متأكدا من السبب</p>
<p>القسم 4: الفهم العام لريادة الأعمال</p>
<p>الرجاء وضع علامة على أول ما يخطر ببالك عند سماع كلمة "ريادة الأعمال" أو "رائد الأعمال" (يمكنك وضع علامة على أكثر من شيء واحد)</p> <p>() تملك أو إدارة نشاط تجاري</p> <p>() اختراع شيء ما (مثل أداة إلكترونية)</p> <p>() أن تكون مبتكرا (الابتكار هو تطبيق أفكار أو أساليب جديدة لإيجاد حلول أفضل)</p> <p>() أن تكون مبدعا (الابداع هو القدرة على تشكيل شئ جديد وذا قيمة)</p>
<p>القسم 5: مساهمة ريادة الأعمال في التنوع الاقتصادي</p> <p>الرجاء</p>
<p>عموما، أدرك أهمية الشركات الصغيرة والمتوسطة للاقتصاد العماني</p>
<p>بشكل عام، أو من أن وجود المزيد من رواد الأعمال العمانيين في سلطنة عمان سيعزز القطاع الخاص</p>
<p>أعتقد أن تأسيس الكثير من الشركات الصغيرة والمتوسطة سيخلق المزيد من فرص العمل للعمانيين في القطاع الخاص في عمان</p>
<p>القسم 6 : بيئة ريادة الأعمال</p>
<p>بوجه عام، أعتقد أنه من السهل بدء نشاط تجاري في عمان</p> <p>اللوائح والقوانين في عمان مشجعة للبدء في نشاط تجاري</p>
<p>إن وجود المزيد من الشركات الصغيرة والمتوسطة لا يتعارض مع القيم الثقافية العمانية</p>
<p>كوني رائد أعمال لا يتعارض مع تعاليم ديني الحنيف</p>
<p>بشكل عام، كوني رائد أعمال لا يقلل من وضعي في المجتمع</p>
<p>إن فتح مشروع تجاري صغير مثل متجر أو مقهى لا يقوض مكانتي الاجتماعية</p>
<p>القسم 7: تعليم ريادة الاعمال</p>
<p>السؤال</p>

<p>هل اخذت مقرر ريادة الاعمال اجباري اختياري</p> <p>إذا كنت قد أخذته كمقرر اختياري، أرجو أن تحدد الأسباب التي جعلتك تأخذه (يمكنك أن تضع علامة على أكثر من سبب)</p> <p>() فضول التعرف على ريادة الأعمال</p> <p>() تعلم كيفية عمل خطة نشاط تجاري</p> <p>() تعليم كيفية البدء في تأسيس نشاط تجاري</p> <p>() كنت ملهماً أن أكون رائد أعمال</p> <p>() الرغبة في العمل في القطاع الخاص</p> <p>() الرغبة في العمل في القطاع العام</p>
<p>في أي فصل دراسي أخذت مقرر ريادة الأعمال</p>
<p>الرجاء ترتيب المهارات التي حصلت عليها من مقرر ريادة الأعمال بناءً على مدى ارتباطها لفهمك لمفهوم ريادة الأعمال</p> <p>() وضع خطة عمل</p> <p>() خطوات تأسيس شركة صغيرة او متوسطة</p> <p>() المهارات الإدارية لتشغيل شركة صغيرة او متوسطة</p> <p>() المهارات المالية لتشغيل شركة صغيرة او متوسطة</p> <p>() أن تصبح مبدعاً (الابداع هو القدرة على تشكيل شيء جديد وذا قيمة)</p> <p>() أن تصبح مبتكراً (الابتكار هو تطبيق أفكار أو أساليب جديدة لإيجاد حلول أفضل)</p>
<p>الرجاء ترتيب المعرفة التي تعلمتها من مقرر ريادة الأعمال بناءً على ارتباطها بفهمك لمصطلح ريادة الأعمال</p> <p>() معنى ريادة الأعمال</p> <p>() اللوائح والقوانين التي تحفز ريادة الأعمال والمؤسسات الصغيرة والمتوسطة</p> <p>() مصادر التمويل المتوفرة من القطاع العام لتأسيس مؤسسات صغيرة او متوسطة</p> <p>() مصادر التمويل المتوفرة من القطاع الخاص لتأسيس مؤسسات صغيرة او متوسطة</p> <p>() فرص العمل المتاحة في القطاع الخاص</p>
<p>How it will be used in analysis</p>
<p>لقد وجدت أن مقرر ريادة الأعمال "محفز" من خلال قدرته على إشاعة التوعية والمعرفة عن ريادة الأعمال والمؤسسات الصغيرة والمتوسطة</p>
<p>لقد وجدت أن مقرر ريادة الأعمال "ممکن" من خلال قدرته على إكساب مهارات ريادة الأعمال</p>
<p>لقد وجدت أن مقرر ريادة الأعمال يكسب خبرات أولية للبدء في نشاط تجاري</p>
<p>لقد ألهمني مقرر ريادة الأعمال لأن أصبح رائد أعمال</p>
<p>أخذ المقرر جعلني أفكر في أن أصبح رائد أعمال</p>

Appendix 6: Pilot Interview Schedule

Note: The items highlighted in yellow were added to the final interview schedule after analysing the pilot interview data and determining the need.

Theme	Question/Item
Motivations for pursuing a degree	<ul style="list-style-type: none"> - Can you tell me little about yourself and why you came to university/college? Can you tell me why you decided to pursue a degree? - This question should lead to talking about the informant's motivations for attending university, which will set the scene for the following questions about their future plans.
Future	<ul style="list-style-type: none"> - Why did you decide to take this path/major? - Could you talk about what you plan to do after graduation? - The answers will indicate which sector the student intends to work in and what kind of job. This will prepare the informant for questions about entrepreneurship.
Entrepreneurship	<ul style="list-style-type: none"> - Have you heard about entrepreneurship? What do you think it is? What does being an entrepreneur mean to you? - I might use prompts for this question for some students who might not know anything about entrepreneurship. For example: Has anyone you know well started a business of his/her own? Can you tell me about this? - I may use more specific prompts if I feel that I am not getting what I want. For example: What skills do you think this person you know possesses or should possess to enable him/her to run his/her business properly?
EEP	<ul style="list-style-type: none"> - If the student is among those who have taken the programme, I will ask the following: - Can you tell me about your experience in taking the programme? - I will use some prompts such as: How do you understand entrepreneurship now? What entrepreneurial skills/areas of knowledge, if any, have you acquired from this programme?
Oman and the future of the economy	<ul style="list-style-type: none"> - Have these skills and knowledge caused you to develop intentions to pursue entrepreneurial activities? Why/why not? - These questions will lead to asking more broadly about Oman's economy and its future. - Could you tell me about the Sultanate's current economy and where it is heading? - What is your opinion about the role private sector plays in Oman? - These questions should lead to talking about issues such as Oman's dependence on energy resources, the domination of foreign labour in the private sector and the slowness of the Omanisation process, the comparison between working in the public and private sectors, and the urgent need for diversifying the economy. If these issues do not emerge naturally, I will use follow-up questions to stimulate answers.
Final comments	<ul style="list-style-type: none"> - These questions then will allow me to ask the informant about his/her point of view of whether entrepreneurship can contribute to economic diversification and why he/she thinks so. - I will finish the interview by asking the informant if there is something relevant, he/she thinks I need to know. - Is there anything else you would like to add, please? - In five-year time, do you think Oman will have more SMEs and entrepreneurs?

Appendix 7: Final Interview Schedule (English)

Semi-structured Interview Questions for **Students**

Themes	Question/Item
Motivations for pursuing a degree	<ul style="list-style-type: none"> - Can you tell me little about yourself and why you came to university/college? Can you tell me why you decided to pursue a degree? - This question should lead to talking about the informant's motivations for attending university, which will set the scene for the following questions about their future plans
Future plans	<ul style="list-style-type: none"> - Why did you decide to take this path/major? - Could you talk about what you plan to do after graduation? - The answers will indicate which sector the student intends to work in and what kind of job. This will prepare the student for questions about entrepreneurship.
Entrepreneurship	<ul style="list-style-type: none"> - Have you heard about entrepreneurship? What do you think it is? What does being an entrepreneur mean to you? - I might use prompts for this question for some students who might not know anything about entrepreneurship. For example: Has anyone you know well started a business of his/her own? Can you tell me about this? - I may use more specific prompts if I feel that I am not getting what I want. For example: What skills do you think this person you know possesses or should possess to be able to run his/her business properly? - If the student is among those who have taken the programme, I will ask the following: - Can you tell me about your experience in taking the programme? - I will use some prompts such as: How do you understand entrepreneurship now? What entrepreneurial skills/areas of knowledge, if any, have you acquired out of this programme?
EEP	<ul style="list-style-type: none"> - Have these skills and knowledge caused you to develop intentions to pursue entrepreneurial activities? Why/why not? - These questions will lead to asking more broadly about Oman's economy and its future.
Oman and the future of the economy	<ul style="list-style-type: none"> - Could you tell me about the Sultanate's current economy and where it is heading? - What is your opinion about the role the private sector plays in Oman? - These questions should lead to talking about issues such as Oman's dependence on energy resources, the domination of foreign labour in private sector and the slowness of the Omanisation process, the comparison between working in the public and private sectors, and the urgent need for diversifying the economy. If these issues do not emerge naturally, I will use follow-up questions to stimulate answers. - These questions then will allow me to ask the informant about his/her point of view of whether entrepreneurship can contribute to economic diversification and why he/she thinks so.
Final comments	<ul style="list-style-type: none"> - I will finish the interview by asking the informant if there is something relevant, he/she thinks I need to know. - Is there anything else you would like to add, please? - In five-year time, do you think Oman will have more SMEs and entrepreneurs?

Table (2): Semi-structured Interviews Questions for **HE Lecturers and Managers**

Theme	Question/Item
Motives for teaching/working in higher education	<ul style="list-style-type: none"> - Can you tell me little about yourself, please, and how you came to teach in higher education? - In other words, why are you a higher education lecturer? - What is important about higher education? - What do you want your students leave school with? In particular, what do you think they should leave with for labour market? - Can you tell me about your experience teaching in the EE programme at your college/university?
Experience teaching entrepreneurship	<p>This question should raise the issue of how the teachers think students perceive this programme. Do they like it, accept it, or reject it and why? Is the programme able to change their intentions? Is the way it is designed and delivered effective and why?</p> <p>Why does the lecturer think it has been implemented/taught in the higher education sector in particular? Why not in primary education? What skills/knowledge does the lecturer think the programme can pass on to students? If the interviewee does not answer these questions, I may use some prompts or follow-up questions to stimulate them.</p>
Entrepreneurship	<ul style="list-style-type: none"> - Based on your experience, can you tell me how you understand entrepreneurship now?
The future of Oman's economy	<ul style="list-style-type: none"> - Could you tell me about the Sultanate's current economy and where it is heading? - How do you see Oman in the future? What are your wishes for the role the private sector should play in Oman? Do you think your students realise these issues?
	<p>These questions should lead to talking about issues such as Oman's dependence on energy resource, the domination of foreign labour in the private sector and the slowness of the Omanisation process, the comparison between working public and private sector, the urgent need for diversifying the economy. Why has the EE programme been implemented/taught only recently? If these issues do not emerge naturally, I will use follow-up questions to stimulate answers.</p> <ul style="list-style-type: none"> - These questions then will allow me to ask the informant about his/her point of view on whether entrepreneurship can contribute to economic diversification and why he/she thinks so. - I will finish the interview by asking the informant if there is something relevant, he/she thinks I need to know.
Final Feedback	<ul style="list-style-type: none"> - Is there anything else you would like to add, please? <p>In five years' time, do you think Oman will have more SMEs and entrepreneurs?</p>

Table (3): Semi-structured Interview Questions for **Policymakers**

Objective (Theme)	Question/Item
Motives for introducing a policy	<ul style="list-style-type: none"> - Can you please tell me little about yourself? How did you get your role and why did you apply for it? - How did get involved in designing the EE policy?
Understanding Entrepreneurship	<ul style="list-style-type: none"> - Can you tell me about your experience in drafting the policy of an EE programme for higher education sector? - Why is Oman taking this policy direction – both more broadly and with specific regard to the programme?
Oman economy	<ul style="list-style-type: none"> - How do you understand entrepreneurialism in Oman’s context? Is it similar to definitions in other countries? Or, is it unique for Oman’s context? How do you think students and lecturers understand entrepreneurship after taking the programme? - How do the programme and policy fit with the broader strategies of economic development and Omanisation? - Only if needed I will present this information: Student survey responses indicate positive attitudes to entrepreneurship as a means of strengthening Oman’s private sector and employment opportunities. In your opinion, what is entrepreneurship’s potential to achieve these goals in a rentier state economy?
Role of higher education	<ul style="list-style-type: none"> - How do you perceive the success of the programme? What existing model are they are using (is it based on anything particular?)? What are the outcomes they hope for? How will they be measured. - EEP delivery: - Why is it an elective? - Why is it being offered at the HE level?
Understanding entrepreneurial skills	<ul style="list-style-type: none"> - How do you envisage the right skills being developed for the diversification of Oman’s economy by encouraging SMEs and entrepreneurship? What is the role of the programme and how does it fit with other strategies under development (you might need to ask what these are)? What are the skills they believe need to be developed? What are the supporting mechanisms for developing the SME sector (e.g. tax breaks, infrastructure investment, industrial strategy)? - Only if needed I will present this information: The survey illustrates a mainly positive view of the programme’s potential in terms of encouraging, empowering, inspiring, and providing first-hand experience. However, there was some hesitation over the fifth point, namely whether the programme led to more SMEs? What is your opinion? - Data show that students are failing to consider owning or running a business to be enjoyable or lucrative. Likewise, the programme did not seem to have significantly impacted the general student preferences for future public or private sector employment. Why do you think this is the case?
Entrepreneurial environment	<ul style="list-style-type: none"> - Do you believe that young Omanis want to become entrepreneurs and if so, what leads them to feel this way? - How do business regulations intend to support business development and what barriers exist to this goal?
Final comments	<ul style="list-style-type: none"> - Is there anything else that you think I should have asked you today? - How do you see Oman in five years’ time? Will it have more SMEs and more entrepreneurs?

Table (4): Semi-structured Interview Questions for **Entrepreneurs**

Objective (Theme)	Question/Item
<p>Motives for being an entrepreneur</p> <p>Understanding entrepreneurialism and entrepreneurial skills</p> <p>Entrepreneurial environment</p> <p>Role of higher education</p> <p>Oman economy</p> <p>Final comments</p>	<ul style="list-style-type: none"> - Can you tell me about yourself, your training, and your skills and what they bring to the business? - How did you get into the business sector? - I might use below follow-up questions if the informant does not address them: <ul style="list-style-type: none"> - What does being an Omani entrepreneur mean to you? - What is your business is and why did you choose that market? - Is this your first business or have you had any other businesses before? How many? - Is it your main source of income? - Have you recruited any Omanis? How many? - Are Omanis good employees and do they have the appropriate skills? - Are they happy working with an Omani private sector entrepreneur? - How do others view you as an entrepreneur? - Have you faced any problems in setting up your business and while you have been running it? - I will ask this if needed only: Although the student survey indicates positive attitudes for becoming an entrepreneur, negative views of business regulations and generally disagreement that it was 'easy to start a business were recorded. How would you comment on this, please? - Have you ever taken any EE programmes/training? - If YES, can you tell me about your experience? - Do you think they have helped you in advancing your entrepreneurial skills and knowledge? Why/why not? - Do you know that there is a newly introduced compulsory EE program in HEIs? Do you think it is a good idea to teach entrepreneurship? Why or why not? - What content might encourage and empower people to become entrepreneurs? Ask them what they feel a programme would have to do to encourage young people to start an SME and what barriers exist. - What do you think might promote the economy and Omanisation? What methods should be used to achieve these goals, please? - This will be asked if needed: Survey responses indicate positive attitudes toward entrepreneurship as a means of strengthening Oman's private sector and employment opportunities. What is the potential of entrepreneurship to do so in a rentier state economy, in your opinion? - Is there anything you would like to add relating to our discussion today? - How do you see Oman in five years' time in terms of entrepreneurial activity growth?

Actual General Interview Schedule (Arabic)

الموضوع	الاسئلة
الدافعية للحصول على درجة علمية	<p>- هل يمكن أن تخبرني قليلاً عن نفسك ولماذا أتيت إلى الجامعة / الكلية؟ هل يمكن أن تخبرني لماذا قررت الحصول على درجة علمية؟</p> <p>- يجب أن يؤدي هذا السؤال إلى الحديث عن دوافع المشارك للالتحاق بالجامعة والتي سوف تمهد الطريق للأسئلة التالية حول خططهم المستقبلية</p> <p>- لماذا قررت أن تأخذ هذا المسار / الرئيسية؟</p> <p>- هل يمكن أن تخبرنا عما تنوي فعله بعد التخرج؟</p>
الخطط المستقبلية	<p>- سوف تحدد الإجابات القطاع الذي ينوي الطالب العمل فيه ونوع الوظيفة. هذا سوف يستعد للسؤال عن ريادة الأعمال.</p>
ريادة الاعمال	<p>- هل سمعت عن ريادة الأعمال؟ ما رأيك هذا يعني؟ ما كونك رجل أعمال يعني لك؟</p> <p>- قد أستخدم المطالبات الخاصة بهذا السؤال لبعض الطلاب الذين قد لا يعرفون شيئاً عن ريادة الأعمال. على سبيل المثال: هل قام أي شخص تعرفه جيداً بتأسيس شركة خاصة به؟ هل يمكن أن تخبرني عن هذا؟</p> <p>- قد أستخدم مطالبات أكثر تحديداً إذا شعرت أنني لا أحصل على ما أريد. على سبيل المثال: ما هي المهارات التي تعتقد أن هذا الشخص الذي تعرفه يمتلكها أو يجب أن يمتلكها لتكون قادراً على إدارة أعماله / عملها بشكل صحيح.</p> <p>- إذا كان الطالب من بين أولئك الذين أخذوا البرنامج ، فساأطلب ما يلي:</p> <p>- هل يمكن أن تخبرني عن تجربتك في أخذ البرنامج؟</p> <p>- سأستخدم بعض المطالبات مثل: كيف تفهم روح المبادرة الآن؟ ما هي المهارات / مجالات المعرفة ، إن وجدت ، التي اكتسبتها من هذا البرنامج؟</p> <p>- هل هذه المهارات والمعرفة غيرت نيتك لمزيد من أنشطة تنظيم المشاريع؟ لماذا لماذا لا؟</p>
برنامج تعليم ريادة الاعمال	<p>- ستؤدي هذه الأسئلة إلى طرح المزيد حول الاقتصاد العماني ومستقبله</p> <p>- هل يمكن أن تخبرني عن اقتصاد السلطنة الحالي؟ وإلى أين تتجه؟</p> <p>- ما رأيك في الدور الذي يلعبه القطاع الخاص في عمان؟</p> <p>- ينبغي أن تؤدي هذه الأسئلة إلى الحديث عن قضايا مثل عمان تعتمد على موارد الطاقة ، وهيمنة العمالة الأجنبية في القطاع الخاص ، وبطء عملية التعمين ، والمقارنة بين القطاعين العام والخاص العاملين ، والحاجة الملحة لتنويع الاقتصاد. إذا لم تظهر هذه المشكلات بشكل طبيعي ، فسوف أستخدم أسئلة متابعة صغيرة لتحفيز الإجابات.</p>
عمان ومستقبل الاقتصاد	<p>- هذه الأسئلة ستسمح لي بعد ذلك بسؤال المخبر عن وجهة نظره / ها حول ما إذا كانت ريادة الأعمال يمكن أن تسهم في التنوع الاقتصادي؟ ولماذا هو / هي تعتقد ذلك؟</p> <p>- سأنتهي من المقابلة بسؤال المخبر عما إذا كان هناك شيء ذو صلة يعتقد / أحتاج إلى معرفته؟</p> <p>- هل هناك أي شيء آخر تود إضافته من فضلك؟</p> <p>-كيف ترى عمان في غضون خمس سنوات من حيث وجود المزيد من الشركات الصغيرة والمتوسطة ورجال الأعمال؟</p>
تعقيبات اخيرة	

DOING EDUCATION DIFFERENTLY

Proceedings of the
2017 STORIES Conference

Edited by
Kari Coffman Şahan
Marianne Melsen
Alice Tawell
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Doing Education Differently: Proceedings of the 2017 STORIES Conference

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About the STORIES Conference

STORIES (Students' Ongoing Research in Education Studies) is a conference for graduate students and early career researchers to discuss their ongoing research in education and education-related projects in other disciplines, such as linguistics, anthropology, social policy intervention, economics, and the wider social sciences. The conference is organised by graduate students and held annually at the Department of Education, University of Oxford. In 2017, the conference theme was Doing Education Differently. Participants were invited to engage with the concepts of difference and diversity as manifested in areas of education in order to offer new perspectives on what it means to do education and educational research in today's world.

Understanding Entrepreneurialism as Part of Skill Formation Strategies to Diversify the Economy

Issa Al-Shabibi, Cardiff University

This study concerns strategies implemented in Oman for skills formation through the promotion of entrepreneurship. This is to support economic transformation away from rentierism (whereby a state derives most of its national revenues from ‘renting’ natural resources, e.g. oil to external actors) and towards a more diversified economy. The study focuses on one particular higher education initiative, providing a ‘lens’ through which to explore stakeholders’ understanding of entrepreneurship and assess its contribution to broader strategies of economic diversification and ‘Omanisation’ (replacing expatriate workers with Omanis). This paper is limited to discussing initial findings from surveys conducted amongst students only. Further data will be gathered to address the research questions through semi-structured interviews with lecturers, policymakers and students in higher education, as well as with entrepreneurs. The initial findings almost indicate a consensus on the interpretation of “entrepreneurship”, as well as positive attitudes to its potential contribution to economic diversification.

Introduction

Globalisation and Oman’s Skill Formation Strategies

The existing literature reveals differences in the way skills are developed worldwide, with prevailing skill formation strategies reflecting the corresponding political economies (Hall & Gingerich, 2009). Oman is a rentier state, now seeking economic diversification. It could be argued that its skill formation strategies are underpinned by a liberal market approach, due to the predominance of general, rather than industry- or firm-specific skills in its population. It is speculated that this is due to the influence of neoliberalism on Oman’s rentier nature, as with all the Gulf Cooperation Council (GCC) States (Hanieh, 2015). Other areas of activity are subsequently influenced, including education, although many features of this

approach are absent, such as competitive market arrangements based on supply and demand, radical innovation, competitive inter-firm relationships, and deregulation policies (Busemeyer & Trampusch, 2012). Furthermore, the State possesses full political and economic power over all sectors, comparable with the developmental state approach (Kwon, 2005). Al-Kindi (2007) concedes that Oman resembles the UK in its education, but highlights a recent shift towards the character of the so-called 'Asian Tigers' - particularly Singapore - in its approach to skills formation.

Nevertheless, despite Oman sharing some features of its skill formation system with other countries worldwide, it does not conform to any single model. It has instead developed a distinctive strategy; it is attempting to lose its status as a rentier state, and is seeking to re-position itself globally (Ennis, 2015). Entrepreneurship has been identified as a component of this strategy, with a corresponding educational initiative to foster entrepreneurship and innovation. This consists of its Entrepreneurship Programme in higher education, aimed at generating an 'entrepreneurial spirit' and changing the prevailing mind-set.

The research works from the following research questions:

1. How is entrepreneurialism understood (by higher education students and other key stakeholders) in Oman?
2. What is the potential of entrepreneurship, as a higher education skill formation strategy, to contribute to the broader strategy of Omanisation and economic diversification of Oman's (rentier state) economy?
3. To what extent might a newly-introduced, higher education sector Entrepreneurial Education Programme develop knowledge and skills for a more diversified and entrepreneurial economy?

Theoretical Framework

The study considers the general drivers behind entrepreneurial education initiatives in terms of policy direction for skills formation and economic development at global level. It also looks at the underpinning political economy. Here, Oman has instituted a policy of economic diversification and 'Omanisation', i.e. replacing expatriate workers with Omanis (Das & Gokhale, 2010). Specific education policies are thus analysed, with a critical review of education and skill formation literature. Crucial to this analysis is Human Capital Theory (HCT), constituting the dominant conceptual

framework for this research area over the past four decades (e.g. Wolf, 2004; Chang, 2012).

HCT presumes that the skills acquired through “investments in schooling, on-the-job training, and other types of experience” will enhance national economic growth (Becker, 1993) and Oman acknowledges this positive relationship in its five-year economic plans and Vision 2020 (Sultanate of Oman Supreme Council for Planning, 2016). With increasing urgency since the beginning of the century, Oman has been attempting to move away from an over-reliance on rentierism towards greater entrepreneurship, via skills formation strategies aimed at economic diversification. This may be observed in the introduction of entrepreneurship into Oman’s higher education institutes (HEIs), with a view to emphasising human capital rather than natural resources for economic development. The expenditure in education accounted for 10.8% of total government spending in 2013, which was 25 per cent more than 2012 (Muscat Daily Staff Writer, 2014). In 2016, the government spent 18% of its total budget on education (Sultanate Ministry of Finance, 2016).

There is indeed a vast body of comparative literature on capitalism, illuminating various approaches to investment in human capital and skills, with evidence of HCT rhetoric in education and skill formation strategies globally. However, the ways in which these strategies are applied can vary.

Methodology

This paper mainly presents survey findings, as part of a larger mixed-method study. The survey was employed to inform the interview schedules, identifying the facts and orienting the research through preliminary background data. The qualitative method for the larger study will use semi-structured interviews to investigate how the stakeholders - students, lecturers and policymakers in higher education, and entrepreneurs in the labour market - understand (and come to understand) the meaning of “entrepreneurship”. Whilst the survey targeted one group (students) within the larger study population, the quantitative data are significant, providing the basis for methodologically robust qualitative data to address the research questions and triangulate the findings.

A review of literature (e.g., Keep, 2014; Kuratko, 2016) led to finalise the three research questions (see above). Survey items/questions were subsequently generated out of these research questions and tested in a pilot

survey. The modified survey was distributed to 57 HEIs, and 726 responses (409 female and 317 male) were recorded. The Statistical Package for the Social Sciences (SPSS) was then used to run a descriptive analysis.

Initial Survey Findings

Survey Item Responses to Research Question One

To address the first research question (see above), one survey item gathered data on respondents' understanding/interpretation of 'entrepreneurship', as presented in Figure 1:

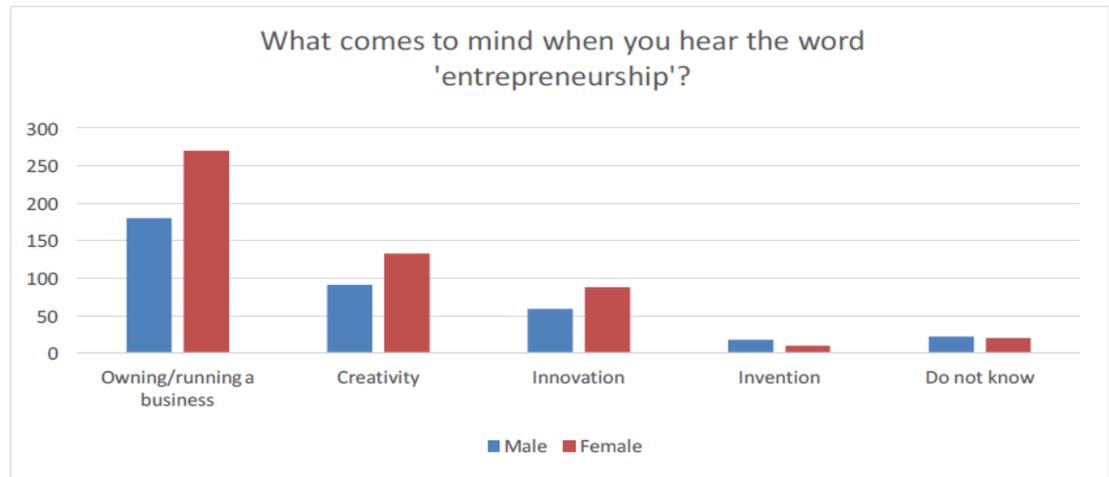


Figure 1: Interpretations of 'entrepreneurship'

The respondents who considered 'entrepreneurship' to mean 'owning/running a business' amounted to 62.1%, while 31% interpreted it as 'creativity' and 20.3% as 'innovation'. Initial observations suggest that gender does not have a major bearing on interpreting entrepreneurship, although female participation was greater, hence the higher columns in Figure 1 registered by the female respondents. Furthermore, the educational level of the students' parents was not found to be influential and this is illustrated in Figure 2:

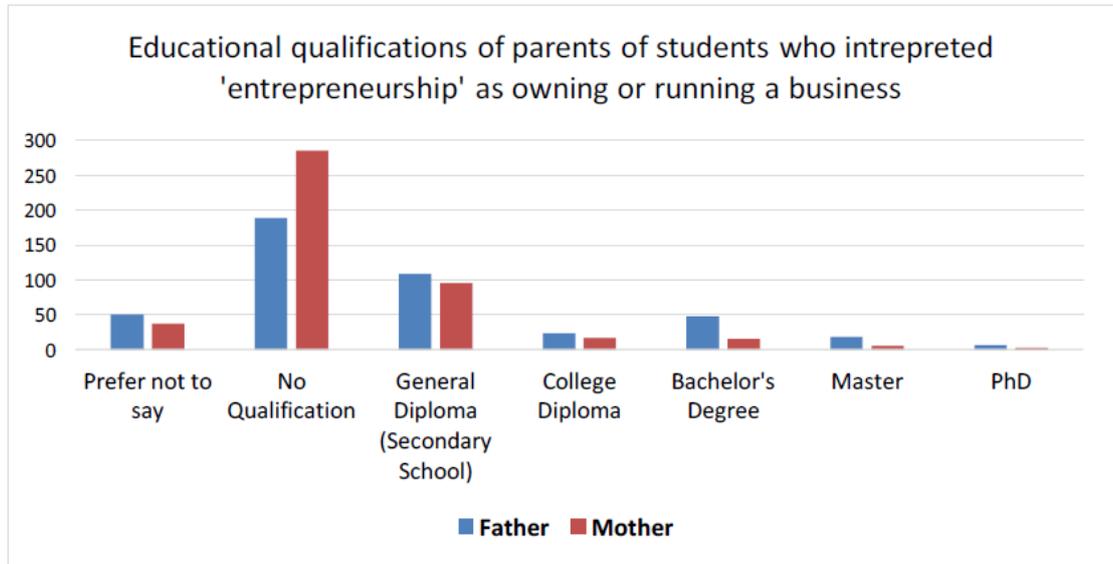


Figure 2: Perceptions of entrepreneurship and educational level of students' parents

Moreover, there was a consensus on interpretations of 'entrepreneurship' across all HEIs, irrespective of sector or ranking, as can be seen for the two most common selections in Figures 3 and 4:

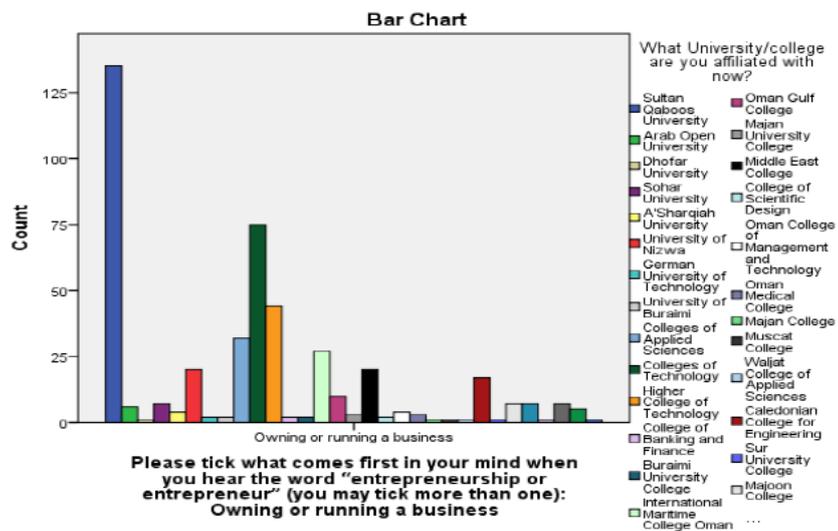


Figure 3: Perception of entrepreneurship as 'owning or running a business', in relation to the HEI attended

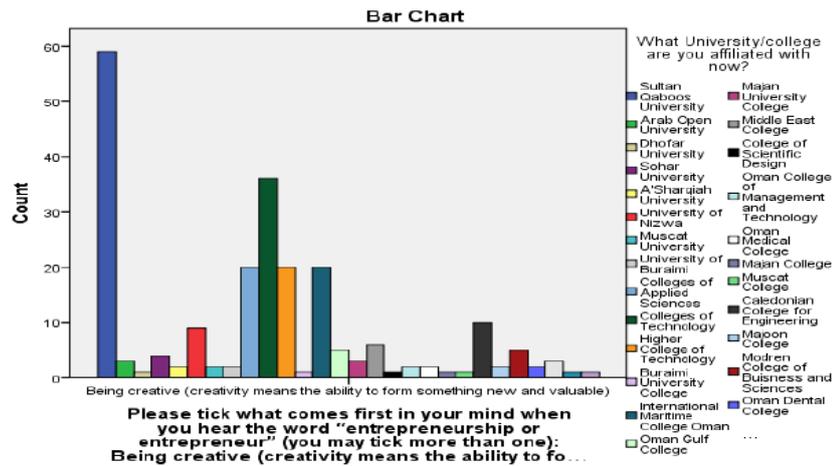


Figure 4: Perception of entrepreneurship as ‘creativity’, in relation to the HEI attended

‘Income’ and ‘enjoyment’ were the most common reasons cited for selecting a course of study, but the students’ post-graduation preferences were mainly recorded as public or private sector employment, rather than owning or running a business:

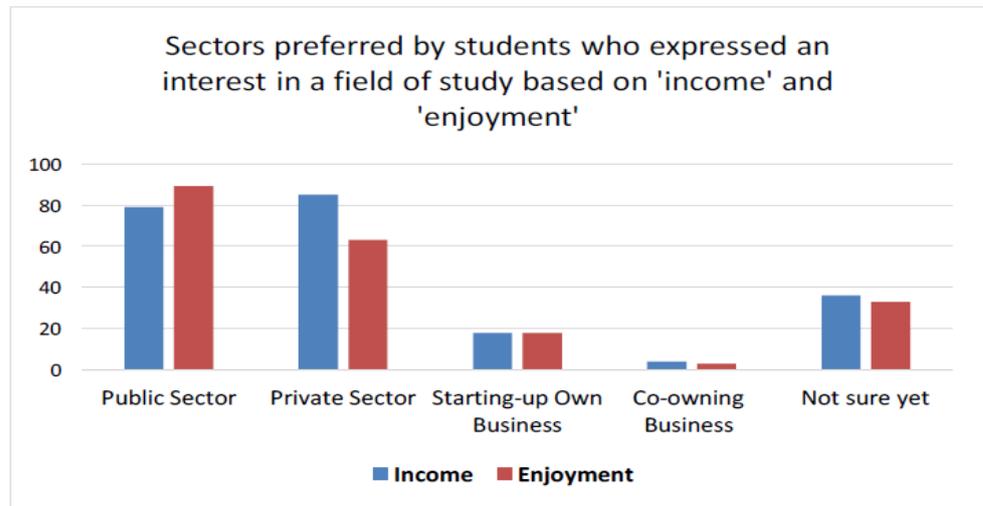


Figure 5: Selecting a field of study based on ‘income’ and ‘enjoyment’

This can be interpreted as students failing to consider owning or running a business as something enjoyable or lucrative. Figure 6, below, shows the preference amongst the majority of students for public- or private-sector employment. This gives rise to the interview question on their reasons for their preference, e.g., asking students why they prefer to work in public, or private sector rather than starting their own business:

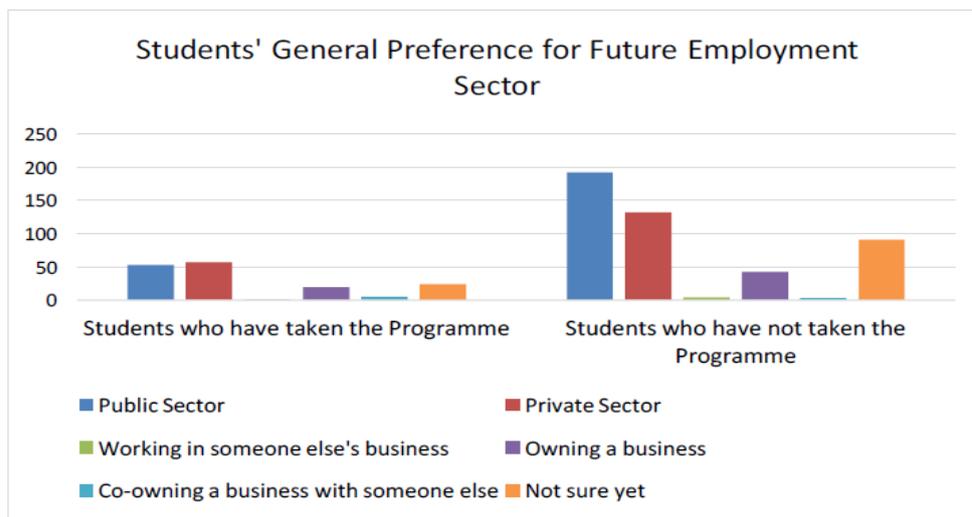


Figure 6: The Students' Preference on future career plans

Survey Item Responses to Research Question Two

In order to answer the second research question on strategy of Oman to use entrepreneurship as one way to diversify the economy, three key points were identified and these are presented below in Figure 7. A Likert scale was applied in each case to reveal the degree of agreement and disagreement with the corresponding item:

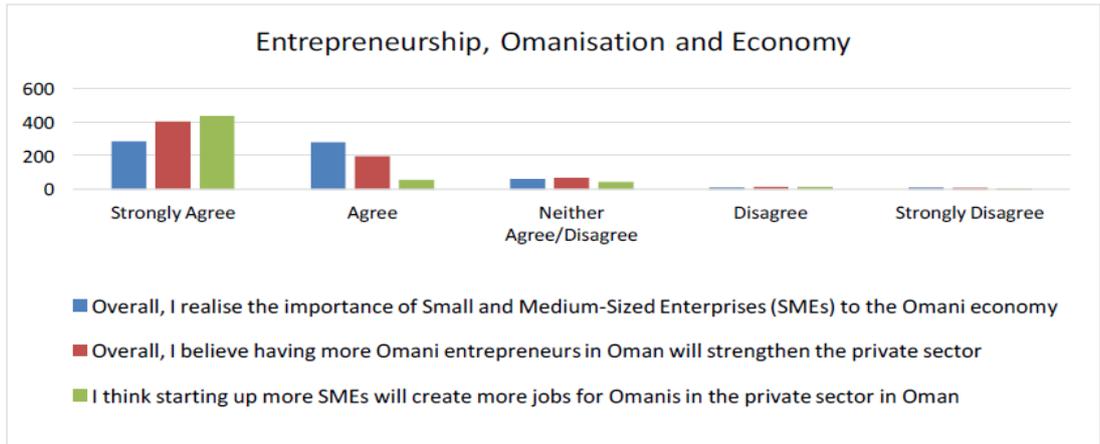


Figure 7: Students' perspectives of the impact of entrepreneurship on Oman's economy and job creation

Overall, Figure 7 illustrates positive attitudes to entrepreneurship as a means of strengthening Oman's private sector and employment opportunities. Interviews would therefore elucidate why and how the respondents think entrepreneurship could strengthen Oman's private sector and job market, thus diversifying its economic base. Identified from the literature (e.g., Burns, 2008; Gartner, 1985), three components were subsequently considered crucial for the entrepreneurial environment: rules and regulations, cultural (including religious) values, and social standing, as shown in Figure 8:

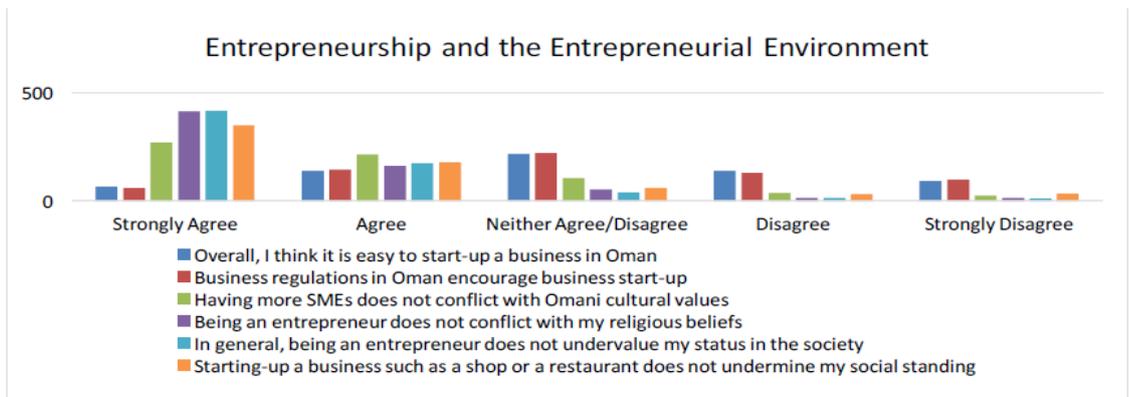


Figure 8: Perceptions of the appropriate entrepreneurial environment

Figure 8 mainly illustrates that the respondents did not perceive any conflict between entrepreneurship, cultural (religious) beliefs and social standing, even in the case of small businesses. However, they expressed negative views of business regulations and generally disagreed that it was ‘easy to start a business’. This could be further explored in the interviews.

Survey Item Responses to Research Question Three

For research question three which seeks to explore the ability of the programme to develop skills, a Likert scale was used to measure how far the respondents agreed that the programme was effective for encouraging, empowering, inspiring and providing first-hand experience. Figure 9, below, reveals the mainly positive view of the programme’s efficacy in terms of these four points, but there was some hesitation over the fifth point, namely whether the programme led to more Small and Medium-Sized Enterprises (SMEs). Here, the number of respondents ‘neither agreeing nor disagreeing’ was equal to those ‘agreeing’. Therefore, it would be interesting to gather further perspectives on this in interviews.

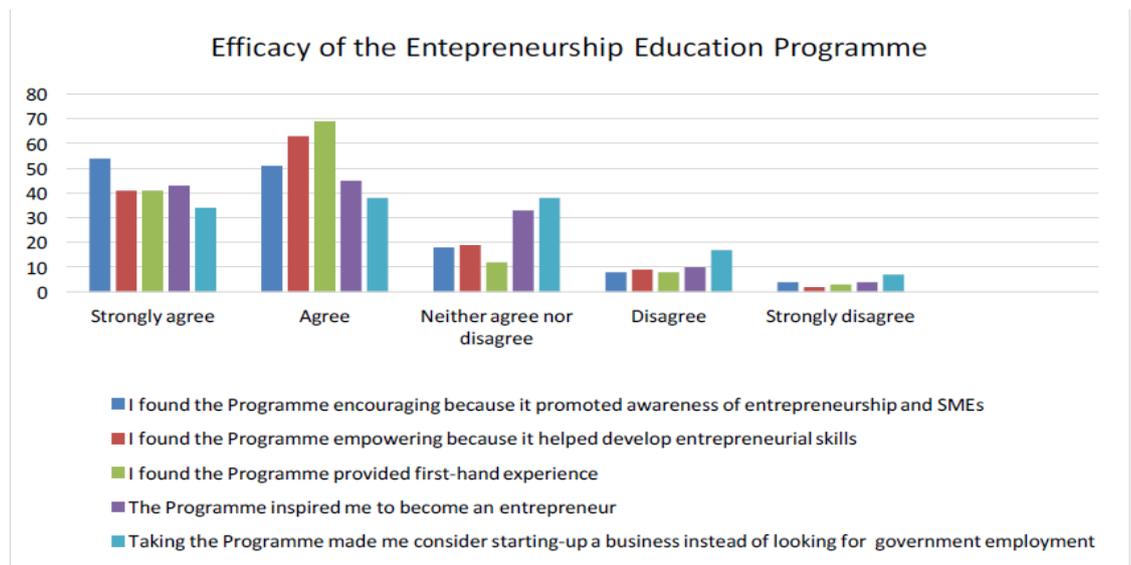


Figure 9: Students’ views of the efficacy of the Entrepreneurship Programme

Conclusion

Oman is currently seeking to develop its economy on its own terms, retaining the existing socio-political hierarchies. There is consequently no attempt to imitate other models, despite certain political and economic parallels with liberal market and developmental state approaches. This study examines skill formation strategies to support economic diversification in Oman, focusing on a recently introduced Entrepreneurship Education Programme. The initial survey findings have set the scene for more in-depth investigation through semi-structured interviews, using the programme as a 'lens' through which to explore stakeholders' understanding of entrepreneurship and its potential to develop skills and knowledge. The subsequent data collection and analysis will answer the 'why' questions and uncover the logic behind the perceptions and attitudes expressed in the students survey. This phase of data collection and analysis will moreover, engage other stakeholders' perspectives.

About the Author

Issa Al-Shabibi studies at Cardiff University under the supervision of Prof. Martin Jephcote and Dr. Dean Stroud, having previously gained a Master's Degree in Urban Education from New Jersey City University in the USA. Before embarking on this current PhD programme, Issa worked for the Research Council in Oman as a research associate in the education and human resources sector. His main area of interest is educational and sociological research.

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Appendix 9: HEI Student Understandings of Entrepreneurship by University/College

	Owning or running a business	Inventing something	Being innovative	Being creative	I do not know
Sultan Qaboos University	29.20%	17.60%	26.60%	24.80%	17.80 %
Arab Open University	1.30%	2.90%	0.60%	1.20%	4.40%
Dhofar University	0.20%	-	-	0.40%	2.20%
Sohar University	1.50%	-	1.30%	1.60%	6.70%
A'Sharqiah University	0.80%	-	-	0.80%	-
University of Nizwa	4.40%	-	5.10%	3.70%	4.40%
Muscat University	0.20%	-	1.30%	1.20%	2.20%
German University of Technology	0.40%	5.90%	1.30%	0.40%	-
University of Buraimi	0.60%	5.90%	0.60%	1.20%	2.20%
Colleges of Applied Sciences	7.10%	8.80%	7.60%	8.90%	6.70%
Colleges of Technology	16.90%	11.80%	15.80%	15.40%	15.60 %
Higher College of Technology	9.20%	11.80%	8.20%	8.90%	11.10 %
College of Banking and Finance	0.40%	-	-	-	-
Buraimi University College	0.40%	-	-	0.40%	-
International Maritime College Oman	5.80%	8.80%	8.20%	8.50%	11.10 %
Oman Gulf College	3.10%	14.70%	5.70%	4.50%	2.20%
Majan University College	0.60%	-	-	1.20%	
Middle East College	4.20%	2.90%	2.50%	2.40%	2.20%
College of Scientific Design	0.40%	-	-	0.40%	2.20%
Oman College of Management and Technology	0.80%	-	0.60%	0.80%	-

Oman Medical College	0.60%	-	0.60%	0.80%	-
Majan College	0.20%	-	-	0.40%	2.20%
Muscat College	0.20%	-	-	0.40%	-
Waljat College of Applied Sciences	0.40%	-	1.30%	-	-
Caledonian College for Engineering	4.00%	-	5.10%	4.10%	4.40%
Sur University College	0.20%	-	0.60%	-	-
Majoon College	1.50%	-	1.90%	0.80%	2.20%
Modren College of Business and Sciences	1.70%	5.90%	1.90%	2.80%	-
Oman Dental College	0.40%	2.90%	0.60%	1.20%	-
AL Zahra College for Women	1.50%	-	1.30%	1.20%	-
Institutes of Nursing and Health Sciences	1.00%	-	0.60%	0.40%	-

Source: Survey data, Total respondents: 727

Appendix 10: Analysis Coding System

Preliminary Literature Theme List A		Data Theme List B	
Theme	Sub-Theme	Theme	Sub-Theme
Policy Implementation	Educational Policy	Policy Implementation	Educational Policy
	HCT		HCT
	Skill Formation Strategies		
Oman Rentier State Context	Political economy	Oman's Rentier State Context	Political economy
	Skill Formation System		Economic diversification and Omanisation
	Higher Education		Weak entrepreneurial foundation
	Culture and Society		Social and Cultural Factors
Entrepreneurship/entrepreneur meanings	Economic meanings	Entrepreneurship/entrepreneur meanings	Dominant economic meanings
	Non-economic meanings		Minimal social meanings
	Entrepreneur traits		Entrepreneur traits
Entrepreneurial Environment	Policies and Regulations	Contextual Factors	Political and economic
	Cultural and Social factors		Cultural and social
Entrepreneurship Education	Meanings, types, approaches	Entrepreneurship Education	Stakeholders attitudes towards EE
	Relationship with Economic growth		Potential of EE to contribute in diversifying economy
	International Models		Difference in EEP Implementation
			EEP Outcomes

Final Analysis Template C	
Theme	Sub-Theme
Entrepreneurship Education and Economic Diversification	HCT
	Educational policy
	Skill formation strategies
	Entrepreneurship Education
Oman's Context	Rentier State implications on entrepreneurship
	Higher education and skill formation system
	Oman's EEP for Economic diversification
Entrepreneurship	Dominant economic meanings
	Social and personal aspects
	Oman's top entrepreneurial characteristics
Factors Shaping Entrepreneurship Understanding and Engagement	Political and Economic
	Social and Cultural
Entrepreneurship Education	Stakeholders' experience
	Difference in EEP implementation
	EEP four outcomes
	EEP potential for diversification the economy

Appendix 11: Three suggested scenarios for Oman's EE

Scenario One: Improving Current EEP Approach			
Suggestion	Details	Example	Resource
Systematic theoretical and practical exposure	First half of course period is theoretically oriented to comprehensively learn about entrepreneurship and start-ups. The second half provides a practical learning experience of what has been theoretically learned in the first half.	The theoretical part introduces students to concepts, knowledge, and instructions on how to start and run a business. The second part requires students to form teams and apply the knowledge in planning, starting, and running a business.	(European Commission 2013; The UK National Centre for Entrepreneurship Education 2018)
Basic entrepreneurship in school	Given that the current EEP is a short course, introducing basic knowledge in school will be supportive preparation for the HE programme.	Including a chapter about entrepreneurship in a life skills course. This includes some key concepts, knowledge, and information on entrepreneurship	
Extra-curricular activities	Given that the current EEP might not allow for many practical activities, having extra-curricular activities outside programme hours will be supplementary.	Establishing entrepreneurship societies, communities, groups, and clubs. HEIs should provide funds for these activities.	

Scenario Two: Replacing Current EEP Approach			
Suggestion	Details	Example	Resource
Theoretical entrepreneurship	Theoretically oriented, resulting in an academic undergraduate degree for which the coursework has a theoretical emphasis.	Having an entrepreneurship major in arts, humanities, and social sciences schools. This major is like other majors and is academically based, uses textbooks, and has quizzes, exams, project reports etc. This major can be specialised in theoretical subjects such as entrepreneurship in the arts, the social sciences, the humanities, etc.	(European Commission 2013; Karimi et al. 2016; The UK National Centre for Entrepreneurship Education 2018; Zaring et al. 2019)
Theoretical and practical entrepreneurship	This is comprised of a mixed approach. Practical and theoretical aspects are included in the programme, resulting in an academic undergraduate degree.	Having an entrepreneurship major in business, engineering and science schools. It is divided and assessed based on theory and practice. The theoretical part is similar to the first model. The second part requires establishing a business in the market. This part can be in the form of an internship course. This major can be a mix of theoretical and practical subjects such as entrepreneurial marketing, management, engineering, etc.	

Scenario Three: Combination of Both Approaches			
Suggestion	Details	Example	Resource
Entrepreneurship as an academic major and a mandatory university/college course	A general entrepreneurship course is offered as a university requisite for all enrolled students. Entrepreneurship is also a major in business school.	Students apply to specialise in entrepreneurship and gain a degree in it. All students who study other subjects must take a 4-month entrepreneurship course.	(Abdulwahed et al. 2013; European Commission 2013; Babson College 2018; The UK National Centre for Entrepreneurship Education 2018)
Entrepreneurship as college major and a university/college elective course	A general entrepreneurship course is offered as an elective course for all enrolled students across different disciplines of study. Entrepreneurship is also a major in business school.	Students apply to specialise in entrepreneurship and gain a degree in it. All students who are studying other subjects may or may not take a 4-month entrepreneurship course .	
Entrepreneurship is embedded in various university/college disciplines of study	Key entrepreneurship knowledge and skills are identified. Activities to create entrepreneurial knowledge and develop skills are designed. These activities are integrated in related major curriculum and course syllabi.	An engineering major could read a textbook chapter dedicated to entrepreneurial engineering. Entrepreneurial engineering can also be included in the form of activities in the curriculum. Civil engineering could have assignments/projects that require students to start up a business in this major.	

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