

**ENTREPRENEURIAL CHARACTERISTICS  
AMONG GRADUATING STUDENTS: ROLE OF  
ENTREPRENEURIAL EDUCATION AND  
TRAINING IN GILGIT BALTISTAN**



*By*

**Ashfaq Hussain**

**PIDE2018FMPHILPP18**

**Supervisor**

**Dr. Mariam Mohsin**

**PIDE School of Social Sciences**

**Pakistan Institute of Development Economics (PIDE)**

**2022**



Pakistan Institute of Development Economics, Islamabad

*PIDE School of Social Sciences*



**CERTIFICATE**

This is to certify that this thesis entitled: “**Entrepreneurial Characteristics among Graduating Students: Role of Entrepreneurial Education and Training in Gilgit-Baltistan**” submitted by **Mr. Ashfaq Hussain** accepted in its present form by the School of Public Policy, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree in Master of Philosophy in Public Policy.

Supervisor:

**Dr. Mariam Mohsin**

Assistant Professor,  
Pakistan Institute of Development Economics,  
(PIDE) Islamabad

External Examiner

**Dr. Fakhar Bilal**

Assistant Professor,  
Department of History,  
Quaid-i-Azam University,  
Islamabad.

Head,  
PIDE School of Social Sciences:

**Dr. Hafsa Hina**

Assistant Professor/HOD,  
Pakistan Institute of Development Economics,  
(PIDE) Islamabad.

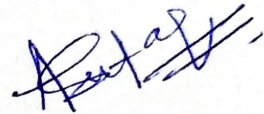


### Author's Declaration

I, Ashfaq Hussain, hereby state that my MPhil Thesis titled as "Entrepreneurial Characteristics among graduating students: Role of entrepreneurial education and training in Gilgit-Baltistan" is my own work and has not been submitted previously by me for taking any degree from Pakistan Institute of Development Economics (PIDE) or anywhere else in the country/world.

At any time if my statement is found to be incorrect even after my graduation the university has the right to withdraw my MPhil degree.

Date: 16/02/2022



Signature of Student

Ashfaq Hussain

## **ACKNOWLEDGEMENTS**

There are a number of people who provided essential assistance till the completion of this thesis work. The most important guidance comes from my supervisor Dr. Mariam Mohsin, who guided and supported me with great advice and substantial knowledge. Her insightful guidance, feedback and patience helped me to get through all the difficulties I faced. And for that I am obliged to my supervisor. I am also thankful to all the academic mentors who helped in the course work at PIDE. The last but not least, I am thankful to all the participants who spent their time while filling the questionnaires. The dedication of all the above personalities have helped me to complete this thesis work.

Ashfaq Hussain

July 25<sup>th</sup>, 2021

## **ABSTRACT**

The focus of this thesis work is to examine the entrepreneurial status of students from Gilgit-Baltistan studying in different universities in Pakistan and abroad. To do so, an evaluation was done to check their entrepreneurial profiling by comparing these students with those students who were not inclined towards entrepreneurship. This study included six psychological characteristics of entrepreneurship to check the inclination towards entrepreneurship. The random sampling method was used to collect the data of last year's students from different universities. Based on the results of t-tests, it was observed that excluding self-confidence the 5 other entrepreneurial characteristics are the highest in the entrepreneurially inclined students when compared to that of non-inclined students. So, out of six psychological schools of thought traits, only one trait showed a similar score among both business and non-business students. This thesis work was only restricted to the graduated and last year university students, in this study the percentage of those students who were inclined towards entrepreneurship is 39. At last, this thesis work gives an understanding and importance of entrepreneurial education and training, and to what extent it is important to enhance the psychological characteristics of entrepreneurship among future entrepreneurs.

Keywords: Entrepreneurship, education and training, students

## TABLE OF CONTENTS

Abstract .....	iv
List of Abbreviations .....	viii
List of Tables .....	ix
List of Figures .....	x
<b>Chapter 1</b> .....	1
Introduction.....	1
1.1 Background of the Study.....	1
1.2 Research Objectives .....	4
1.3 Research Questions .....	4
1.4 Purpose of the Study .....	5
1.5 Organization of the Study .....	6
<b>Chapter 2</b> .....	8
Literature Review.....	8
2.1 Previous Literature.....	8
2.2 Entrepreneurial Potential in Gilgit Baltistan .....	10
2.3 Entrepreneurial Education and Training .....	12
2.4 Entrepreneurial Characteristics .....	15
2.4.1. Innovativeness.....	17
2.4.2. Need for achievement .....	18
2.4.3. Locus of control .....	20
2.4.4. Risk taking propensity .....	22
2.4.5. Tolerance for ambiguity.....	23
2.4.6. Self confidence.....	24
2.5 Conceptual framework.....	25
<b>Chapter 3</b> .....	26
Methodology.....	27
3.1 Study Design .....	28
3.2 Data Collection Method .....	29
3.3 Self-Administered and close-ended Questionnaire .....	29
3.4 Questionnaire Design .....	30

3.5	Definition of the Research Sample.....	30
3.6	Sampling Method.....	30
3.7	Size of the Sample and criteria for selection.....	31
3.8	Locale of the Study.....	31
3.9	Techniques for Data Analysis.....	31
3.10	Scale and Research Instrument.....	32
3.11	Ethical Consideration.....	33
<b>Chapter 4</b>	.....	<b>35</b>
Data Presentation and Findings	.....	35
4.1	Data presentations and the elementary situation of the responses.....	35
4.2	Descriptive Analysis.....	39
4.3	Cronbach’s alpha reliabilities.....	40
4.4	Correlations.....	41
4.5	Hypothesis Testing.....	45
<b>Chapter 5</b>	.....	<b>48</b>
Discussion and Conclusion	.....	48
5.1	Discussion.....	48
5.2	Conclusion.....	52
<b>Chapter 6</b>	.....	<b>55</b>
Policy Recommendation, Research Limitations and Further Research	.....	55
6.1	Policy Recommendation.....	55
6.1.1	Recommendations for the government.....	55
6.1.1.1	Reduce the start-up costs.....	55
6.1.1.2	Improve service system for entrepreneurship.....	56
6.1.1.3	Government’s relationship with universities and enterprises.....	56
6.1.2	Recommendation for the educational institutes.....	56
6.1.2.1	Importance of primary and secondary education.....	56
6.1.2.2	Trainings and selection of teachers for entrepreneurship education.....	57
6.1.2.3	Strong evaluation system for entrepreneurship education.....	57
6.1.2.4	Practice teaching.....	58
6.1.3	Recommendations for students.....	58

6.1.3.1 Design the whole plan before starting any business .....	58
6.1.3.2 Budget planning .....	58
6.1.3.3 Cooperation with industries .....	58
6.1.3.4 Team work.....	59
6.1.3.5 Bring competitiveness .....	59
6.2 Research Limitations.....	59
6.3 Further Research .....	60
References .....	61
Appendix A.....	67



## **LIST OF ABBREVIATIONS**

GB - Gilgit Baltistan

KIU – Karakoram International University

LoC - Locus of Control

PIDE - Pakistan Institute of Development Economics

PBS - Pakistan Bureau of Statistics

SME - Small and Medium-sized enterprises

## LIST OF TABLES

<i>Number</i>		<i>Page</i>
Table 4.1	Adoption sources of questionnaire items	38
Table 4.2	Cronbach's Alpha reliabilities	41
Table 4.2	Correlations among variables	44
Table 4.3	Mean and S.D of variables	45
Table 4.4	t-value and p-value testing results	47

## LIST OF FIGURES

<i>Number</i>		<i>Page</i>
Figure 1.1	Theoretical framework diagram	26
Figure 4.1	Results from inputs given by students	36
Figure 4.2	Results of question related to career planning	37

# **CHAPTER 1**

## **INTRODUCTION**

The first chapter acts as a preface which is aimed to give an overview of the whole topic of this thesis. This chapter starts with the background of the research, after that the research problem of this thesis is discussed. The main research questions are also framed and expressed, along with the significance of the study part. Finally, this chapter also has the whole outline of this research.

### **1.1 Background of the Study**

Entrepreneurship is regarded as the backbone to attain social development objectives and economic objectives, such as innovativeness, progress, equity, and minimizing unemployment. As it includes both formal and informal economic activities it fosters the economy by creating wealth. In turn, it adds to the development by contributing to high-growth enterprises or, by creating necessity-driven entrepreneurship, which helps in making incomes and keeping unemployment levels down within vulnerable masses. To succeed as entrepreneurs, it requires focus and support which stimulate individuals' choices to become so. The growth in entrepreneurship requires both skilled individuals and the mentorship level in order to enable newcomers to make the most of entrepreneurial opportunities. Research scholars argue that these skills, mentality, and forms of knowledge can be cultured through education and training initiatives. Survey reports and previous research also support the idea that entrepreneurship learning contributes to business promotion (Herrington & Kew, 2016; Kautonen et al., 2015; Martin et al., 2013). Since the beginning of the 21<sup>st</sup> century, entrepreneurial education has gained much importance as competitiveness and innovativeness hold significance in modern

knowledge-based economies. Premand et al. (2012) suggests that entrepreneurial characteristics can be improved and refined by advancements in entrepreneurial education and training in educational institutions. Previous literature also suggests that entrepreneurial characteristics can be cultured through academic learning (Kuratko, 2005; Timmons et al., 2004) while other scholars are of the view that not all characteristics can be taught or learned (Haase & Lautenschläger, 2011). Entrepreneurship may be categorized as “Arts” and “Science” where art is not simply learnable (creativity, innovation and ,thinking) except with applied skill, contrary to that science for instance: business management skills are attainable through education (Valerio et al., 2014).

Across the globe, there is extensive recognition of the significance of entrepreneurship to economic health (Gal et al., 2019). Despite such significance of entrepreneurship skills, there is very limited research on entrepreneurial education (Nabi et al., 2017) although there is an extensive amount of research on general entrepreneurship but limited research is there on entrepreneurial education and training (Neck & Corbett, 2018).

The purpose of this thesis work is to examine the association between entrepreneurial characteristics among university students and the role of entrepreneurial education and training. To what extent do educators in institutions flourish students through education and training to adore entrepreneurial characteristics needed to succeed by building new ventures and businesses. This research work will also offer how universities mentor students to explore entrepreneurial opportunities. The area of interest I have chosen is students from Gilgit-Baltistan

At the global, international, national, and local levels entrepreneurship education and training have been introduced on an experimental basis. It is also accepted as a recognized field

of study because of the demand from policymakers and students. Thus, it has been transformed as the area where students receive entrepreneurial mindset and skills; also, it incorporates them with entrepreneurial characteristics. According to Valerio et al. (2014) Education and training on entrepreneurship encourage students to take part in the entrepreneurial activities of society. Cloete and Ballard (2012) also argue that these characteristics and skills can be categorized as the traits such as leadership qualities, originality and innovativeness, self-confidence, risk-taking propensity, and motivation. Other than that, skills such as a way of thinking, management, marketing, human resource management, and financial management skills are the characteristics that must include within a student who learns entrepreneurial education and training (Karlan & Valdivia, 2011).

In recent periods scholars in their research have incorporated the importance of entrepreneurial activities to boost economic activities in the region. But they have targeted the potential markets to be tapped under CPEC or subsidiary markets under it. But there is no research on the impact of business education and training for enhancing the traits among potential future entrepreneurs (university students acquiring business-related degrees) in the Gilgit-Baltistan region. So, this thesis work is interested in finding the effect of education and training (mentorship) in promoting entrepreneurship inclination among university students. For the said purpose author has adopted “the trait model”. The trait model only focuses on the psychological characteristics of an entrepreneur, so it does not include the social and environmental factors that incline a student towards entrepreneurship. The psychological trait model has six characteristics of a potential entrepreneur (tolerance for ambiguity, locus of control, innovativeness, risk-taking propensity, innovativeness, need for achievement, and self-confidence). According to the model these traits can be learned through education and training.



The prime goal of this thesis is to find out whether or not there is any need for entrepreneurial education. For the said purpose study will check the entrepreneurial profile of entrepreneurially inclined and non-inclined students. If the entrepreneurial characteristics are high in inclined students, then it means that entrepreneurial education and training is important to encourage more students to become entrepreneurs, if the entrepreneurial profile of inclined and non-inclined are the same then there is no role of entrepreneurial education and training among university students. For Practical suggestions – This thesis will provide insight into entrepreneurship education, whether entrepreneurial traits can be enhanced to raise good entrepreneurs or not.

## **1.2 Research Objectives**

This research work has two main objectives, which are stated below:

1. The first aim is to explore the entrepreneurial profile of university students on the basis of psychological trait model which states that some traits of entrepreneurship can be enhanced through entrepreneurship education and training.
2. The second objective of this research work is to analyze the profile of the students and devise a nationwide plan for entrepreneurship education and training.

## **1.3 Research Questions**

- i. Do entrepreneurially inclined students (Students who have studied entrepreneurship) can score more in terms of The Trait Model of entrepreneurship than non-inclined students (students with no entrepreneurship education and training).
- ii. Is there any importance of entrepreneurial training and education to boost and encourage entrepreneurship?

iii. Do entrepreneurship skills must need to be taught at universities or skills persist among students who do not study business education?

#### **1.4 Purpose of the Study**

In recent period, scholars in their research have incorporated the importance of entrepreneurial activities to boost economic activities in Gilgit-Baltistan region. But they have targeted the potential markets to be tapped under CPEC or subsidiary markets under it only. There is no research on the impact of business education and training for enhancing the traits among potential future entrepreneurs (University students acquiring business related degrees) in the region. So, I have chosen to find the impact of education and training (mentorship) on entrepreneurial characteristics. For the said purpose I have chosen “the personality trait model” of entrepreneurship. The trait model has six entrepreneurial characteristics (need for achievement, locus of control, risk taking propensity, tolerance for ambiguity, innovativeness, and self-confidence). According to the model these traits can be learned through education and trainings. It has been a significant element of research on entrepreneurship. Various research studies have analyzed certain traits of personality as the characteristics of entrepreneurs. So, the prime objective of this research is to find out the entrepreneurial profile of students on the basis of trait model which has 6 psychological characteristics. – This study will provide insight into the importance of entrepreneurship education and training in encouraging potential future entrepreneurs i.e., university students. Entrepreneurship activities are at initial stages in Gilgit Baltistan, but gradually entrepreneurial activities are gaining importance. In recent past many scholars are working in this specific arena. For instance, Khan et al. (2020) acknowledged that in GB there is dire need to initiate training and skill courses so that young youth must avail employment opportunities and new-ventures. For instance, courses for skill development such as

mobile apps development, web designing, etc. The availability of internet is an issue that needs to be addressed. The most potential areas for young entrepreneurs are custom clearing services, transport management, goods forwarding services, tourism management, e-commerce, freelancing etc. Government should give financial incentives and trainings to young youth so they can enter these arenas

### **1.5 Organization of the Study**

The following are the chapters included in this study.

✓ Chapter no: 1 – Introduction

The first chapter acts as a preface which is aimed to give an overview for the whole topic of this thesis. This chapter starts with the background of the research, after that the research problem of this thesis is discussed. The main research questions are also framed and expressed, along with the significance of the study part. Finally, this chapter also has the whole outline of this research.

✓ Chapter no: 2 – Literature Review

This chapter contains the literature on entrepreneurship. Through the existing studies on the entrepreneurship this research narrowed 6 entrepreneurial characteristics which are prerequisite for a successful future entrepreneur. The narrowed characteristics are widely accepted by scholars, and these are known as psychological characteristics which can only be enhanced through entrepreneurial education and training. This chapter also includes the diagram of the methodological framework.

✓ Chapter no: 3 – Methodology

This chapter includes the instrument used while collecting the data. Other than that, the designing of data collection mechanism is discussed. Furthermore, this chapter has information about the locale of this study and how sample size was adopted.

✓ Chapter no: 4 – Data Presentation and Findings

This chapter consists of the results of the quantitative data from six main entrepreneurial characteristics and their relationship with entrepreneurial education and training in Gilgit-Baltistan. In this chapter the author has displayed the results of the quantitative analysis from the adopted questionnaire. The questions in the questionnaire focused on questions related to entrepreneurial inclination of the university students.

✓ Chapter no: 5 – Discussions and conclusion

This section of discussion comprises the discussion and analysis based on theories presented in literature and on the exhibited results of our quantitative data. Other than that, the analysis of the acquired data gives the answers to the research questions which were raised in this study. This section also presents the analysis, empirical findings and conclusions in this thesis work that gives answers to the questions in this study.

✓ Chapter no: 6– Policy recommendations, Research directions and research limitations

Based on the results, this chapter aims to provide the policy recommendations on how to enhance the entrepreneurship rate and the success rates of students with business background among the students of Gilgit-Baltistan region. These recommendations are aimed to provide suggestions from three angles which are government support, the enhancement of students' capability and the proper implementation of business education.

## **CHAPTER 2**

### **LITERATURE REVIEW**

The contents of this chapter mainly include the internal and external influential aspects which affect the entrepreneurial inclination of young potential entrepreneurs. Other than that, this chapter includes five entrepreneurial characteristics of potential entrepreneurs. In addition, this chapter also includes the importance and need of entrepreneurship in the Gilgit-Baltistan region.

#### **2.1 Previous Literature**

Many scholars have defined entrepreneurship in different ways. Valerio et al. (2014) suggest that entrepreneurship is the course of initiation of economic activity as an enterprise to generate wealth. It creates ways to create economic development because its outcomes are the creation of jobs by providing employment, from innovativeness to reduction in poverty as it links international and national traits of growth and development. Baumol et al. (2011) see entrepreneurship as the engine behind creation of jobs and self-employment across the globe. Van Praag and Versloot (2007) argue that it is the major cause between entrepreneurial process, technological change, and innovativeness.

The scholarly work of Baig et al. (2020) inspected the impact of CPEC-fostered tourism on small and household level enterprises in the GB region. Their focus was on the CPEC and examined how it can open new opportunities for entrepreneurs in areas such as tourism. They also discussed major challenges to attain CPEC-fostered business opportunities. Furthermore, this study has assessed the sustainability of micro-firms operational in GB along the official CPEC route. 280 questionnaires were distributed among entrepreneurs for sample data. They analyzed the data through the binary logistic regression model technique. The main features of

this study are;(1) developing a hypothesis for tourism-related SMEs and role of CPEC; (2) challenges and new opportunities for small industries; (3) studying the perspectives of firm owners, and future impacts on their businesses.

The scholarly work of Saleem (2011) explored the entrepreneurial approaches in the Gilgit Baltistan region. He highlighted eight regional factors and argued that entrepreneurs give weightage to these regional factors. He argues that there is more to do to build confidence, cultural mindset, and change expectations of entrepreneurs from GB to make them more successful entrepreneurs. Furthermore, he said that the people of GB are ready for change so government and policymakers should use the governance structure of GB to introduce more inclusive and investor-friendly policies to promote entrepreneurial activities in this region to boost economic activity. At last, his work gives an idea that there is a long way for the government to develop and introduce the usage of Information Technology in this part of the world. The introduction of internet-based businesses will give access to big markets. The region will gain reliable information about new ways of business and will also create cost-effective capacity building among potential entrepreneurs.

Kuratko (2005) in their study focused on the role of the universities in fostering entrepreneurship among the students. They argue that universities must introduce steps to create an entrepreneurially supportive environment for the students. Furthermore, they are of the view that university students are among the potential future entrepreneurs, so enterprises culture at campuses would help students to initiate new ideas and ventures. The role of universities in fostering entrepreneurship is also important because they can provide resources and other essential facilities to the students. They also support the argument that apart from entrepreneurial skills and knowledge, a positive image about entrepreneurship is also essential.



There is a limited level of research on entrepreneurship development in the Gilgit-Baltistan region. Although after the initiation by multi-dollar projects under the CPEC, the importance of entrepreneurship in this region is prime concern for scholars and policy makers. In recent times, many scholars have shown interest on this concerned area of entrepreneurship in this region. But there is no existing literature on the relationship between entrepreneurial characteristics among potential future entrepreneurs (business students) and entrepreneurial education and training. So, the emphasis of this research work is to check the linkage between these two concerned variables.

## **2.2 Entrepreneurial Potential in Gilgit Baltistan**

Entrepreneurial potential in Gilgit Baltistan is gaining importance. In recent past many scholars are working in this specific arena. For instance, Khan et al. (2020) acknowledged that in GB there is a dire need to initiate training and skill courses so that young youth must avail employment opportunities and new ventures. For instance, courses for skill development such as mobile apps development, web designing, etc. The availability of the internet is an issue that needs to be addressed. The most potential areas for young entrepreneurs are custom clearing services, transport management, goods forwarding services, tourism management, e-commerce, freelancing, etc. Government should give financial incentives and trainings to young youth so they can enter these areas.

There is very limited research work on the impact of CPEC on small and medium level enterprises in Gilgit Baltistan. Baig et al. (2020) inspected the impact of CPEC-fostered tourism on small and household level enterprises in GB region. Their focus was on the CPEC and examined how it can open new opportunities for entrepreneurs in areas such as tourism. They also discussed major challenges to attain CPEC-fostered business opportunities. Furthermore,

this study has assessed the sustainability of micro firms operational in GB along the official CPEC route. 280 questionnaires were distributed among entrepreneurs for sample data. They analyzed the data through binary logistic regression model technique. The main features of this study are:1) developing hypothesis for tourism related SMEs and role of CPEC; challenges and new opportunities for small industries; 3) studying the perspectives of firm owners, and future impacts on their businesses.

Many scholars have explored the entrepreneurial approaches in the Gilgit Baltistan region. The research conducted by Saleem (2011) highlighted eight regional factors and argued that entrepreneurs give weightage to these regional factors. He argues that there is more to do to build confidence, cultural mindset, and change expectations of entrepreneurs from GB to make them more successful entrepreneurs. Furthermore, he said that people of GB are a ready for change, so government and policymakers should use the governance structure of GB to introduce more inclusive and investor-friendly policies to promote the entrepreneurial activities in this region to boost economic activity. At last, his work gives an idea that there a long way for government to develop and introduce the usage of Information Technology in this part of the world. The introduction of internet-based businesses will give access to big markets. The region will gain reliable information about new ways of businesses and will also create cost-effective capacity building among potential entrepreneurs. But there is no research on the impact of business education and training for enhancing the traits among potential future entrepreneurs (university students acquiring business-related degrees) in the Gilgit-Baltistan region. So, this thesis work is interested in finding the effect of education and training (mentorship) in promoting entrepreneurship inclination among university students. For the said purpose author has adopted “the trait model”. The trait model has six characteristics of a potential entrepreneur (tolerance

for ambiguity, locus of control, innovativeness, risk-taking propensity, innovativeness, need for achievement, and self-confidence). According to the model these traits can be learned through education and training. The prime goal of this thesis is to find out whether or not there is any need for entrepreneurial education. For the said purpose study will check the entrepreneurial profile of entrepreneurially inclined and non-inclined students. If the entrepreneurial characteristics are high in inclined students, then it means that entrepreneurial education and training is important to encourage more students to become entrepreneurs, if the entrepreneurial profile of inclined and non-inclined are the same then there is no role of entrepreneurial education and training among university students. For Practical suggestions – This thesis will provide insight into entrepreneurship education, whether entrepreneurial traits can be enhanced to raise good entrepreneurs or not.

### **2.3 Entrepreneurial Education and Training**

Entrepreneurial education and training are the processes to make entrepreneurial mindset and skills, also it is the course of incorporating entrepreneurship characteristics among the students. Among the entrepreneurship literature, education and training results are available with mixed outcomes. For instance, (Haase & Lautenschläger, 2011) using empirical evidence has shown that there is a negative or insufficient impact of entrepreneurship education on the student's intentions towards entrepreneurship. Apart from that, many also believe that education and training on entrepreneurship has only short-term impacts on entrepreneurial intentions. Similarly, Pittaway and Cope (2007) have found evidence that there exists very weak connection between business start-ups and entrepreneurial education. Other than that, Martin et al. (2013) have found that types of education and training have different results of entrepreneurial intentions. They argue that education focused and training focused entrepreneurship has different

effects on student's minds. The entrepreneurial education is important for the efficiency of students as this form of knowledge give practical base for business, gives self-confidence for new venture and boosts development skills to attain business success (Wilson et al., 2007). To facilitate young potential business through university education can support the cause students inclined towards entrepreneurship. But this initiative is quite difficult especially in underdeveloped areas such as GB. So, special consideration from policy makers and government is a must to equip young entrepreneurs with required skills.

The research study conducted by Ibidunni et al. (2020) shed light on the importance of entrepreneurship in developing countries. They argue that entrepreneurship is a way out from all economic evils persisted in developing economies. They further said that in recent time the governments in developing countries are focusing more to promote entrepreneurship among youths. Their study suggests that significant shift towards entrepreneurship will take place among youth against white-collar jobs. For the said purpose required entrepreneurial characteristics must be enhanced among the youth in developing countries.

The study conducted by Ibrahim and Soufani (2002) observed the role of entrepreneur education and training among the Canadian entrepreneurs. The objective of their study was to check whether education and training can reduce the risk of small business failure in Canada or not. The findings suggest that trainings and education are effective to enhance the expertise of enterprises. They emphasized the importance of education and training to reduce the failure risk. They argue that since the growth and expansion of Canadian economy is primarily dependent on SME sector, so the job creation and domestic output rely heavily on this sector. So, to back this sector with expertise and to reduce the risk of failure in ventures the role of entrepreneurial education and training is of great importance.

Research conducted by Henry et al. (2005) focused on the entrepreneurship education and training. The main objective of their study was to examine whether or not entrepreneurship can be taught. They emphasized the importance of entrepreneurship education and training in modern environment in the first part of their study. The second part of their study consisted of various categories of entrepreneurship programs. They also focused on the delivery and design of these programs. The final part of their research consisted of approaches to teach entrepreneurship. The findings of this paper reports that there is little uniformity, despite significant growth in entrepreneurship education and training. Their finding suggests that attention should be given to the science and the art of entrepreneurship, because some aspects of entrepreneurship can be taught, and measures must be taken to consider these aspects.

The scholarly work of Garavan and O'Cinneide (1994) gives the evidence there is positive link between the number of new start-ups and education and training. They claim that students who participated in education and training programs are likely to initiate their own ventures. To empirically check this claim, they constructed a program that consisted of students who took training programs and students who does not took training program. The students who took program started their own ventures as full-time employment compared to the students who did not took the program. This observation gives an idea that entrepreneurship education and training is important to convince students to start new ventures.

Khan et al. (2020) acknowledged that in GB there is dire need to initiate training and skill courses so that young youth must avail employment opportunities and new ventures. For instance, courses for skill development such as mobile apps development, web designing, etc. The availability of internet is an issue that needs to be addressed. The most potential areas for

young entrepreneurs are custom clearing services, transport management, goods forwarding services, tourism management, e-commerce, freelancing etc.

## **2.4 Entrepreneurial Characteristics**

While studying entrepreneurship it is factually possible to favor out factors that influence entrepreneurial behavior. The overall factors of entrepreneurship are social, environmental, and individual. The model of social factors deals with the personal background, stage of career, family background (Green et al., 1996; Jeffrey, 2002; Khan et al., 2020; Robinson et al., 1991), growth environment and early life practices. Contrary to that, model of environmental factors is linked with the contextual factors such as indirect benefits, the overall impact of market conditions, timing of opportunities in the career process, value of wealth, tax reduction (Jeffrey, 2002), economic culture, social upheaval and supportive social culture (Green et al., 1996). The model of individual factor also known as the trait model is focused on the personal characteristics of the entrepreneur (Koh, 1996). The main assumption of this model states that entrepreneurs have some unique traits and characteristics, values and attitudes which incentivized them and also extricate them from others (Koh, 1996; Thomas & Mueller, 2000).

The available literature on individual model or trait model explores questions and provides satisfactory answers to these questions as to whom the entrepreneurs are, why they showed tendency to become entrepreneur, and what are the characteristics of a successful and unsuccessful ventures (Bygrave & HOFER, 1991; Hannu, 2000). The trait model has investigated and provided significant answers and elements to the research on entrepreneurship. Several scholarly works have analyzed several traits of individuals as the characteristics required for entrepreneurship. For the said purpose, the scholarly work of Entrialgo et al. (2000) mentioned the determinants required for entrepreneurship to be named as need for achievement,



locus of control and tolerance for ambiguity. In the empirical work of Stewart Jr et al. (1999), innovation, need for achievement and risk taking propensity have been used as the main elements to separate entrepreneurs from the rests of other groups such as small business owners and corporate managers. In this research work there are six individual characteristics, and this research work intends to use these characteristics to check the entrepreneurial profile of university students. These six characteristics are locus of control, need for achievement, tolerance for ambiguity, self-confidence, and innovativeness. The reason to choose these was because these were frequently used and cited in major studies on the literature for entrepreneurship. These scholars are of the view that these characteristics are capable to represent the entrepreneurial behavior of personalities. Further it is noteworthy that the overall results of the study on these traits may still be inconclusive. But within the literature of entrepreneurship there is research that both refutes and supports the relation among the mentioned characteristics. Conceptual, methodological and definitional complications are viewed as the major causes of the differences (Robinson et al., 1991; Stewart Jr et al., 1999). Countries around the world have realized the importance of entrepreneurship as it supports the growth of economies. The entrepreneurial personality traits of entrepreneurs can be enhanced through formal education of entrepreneurship. There are various elements of personality traits such as self-confidence, locus of control and proactive personality. The research work conducted by Fuller et al. (2018) argue that self-confidence is the trait that enable persons to have confidence to use the resources they have to utilize efficiently. According to Adnyana and Ni Made (2016) the locus of control is a trait that enables people to control the situations around them and how their decisions influence their surroundings. The scholarly work conducted by Antonio (2012) focused on the entrepreneurial education. According to him, entrepreneurial education gives

students a chance to become educated future potential entrepreneurs. The entrepreneurial education is a platform where students can start getting new ideas to introduce new ventures and enterprises. According to the research work of Karabulut (2016) the entrepreneurial inclination of potential future entrepreneurs (university students) is the desire to become entrepreneur in any stage of future. So, it is a plan of a potential entrepreneur to choose entrepreneurship as a career in future. Furthermore, Shahab et al. (2019) investigated the role and status of entrepreneurship education in enhancing the self-confidence characteristic to become entrepreneurially inclined. The findings of their research concluded that the entrepreneurship education flourish and strengthens the self-confidence of future entrepreneurs. From the above research work, it gives us a clear understanding that there is a strong connection between entrepreneurial education and the entrepreneurial traits in their ability to impact the entrepreneurial inclination of potential future entrepreneurs.

#### **2.4.1. Innovativeness**

Innovation is defined as creation of new quality or new products, new ways of production, entry into new avenues and markets, creation of sources of supply or introducing new structures and organization in business. Innovative success needs an act of will from a leader and it must be carried through (Hansemark, 1998). Apart from that, innovativeness is regarded as a behavior which symbolize entrepreneurship and entrepreneurial orientation (Entrialgo et al., 2000). Also, according to the definitions of entrepreneurs always eager to hunt new opportunities (Zacharakis, 1997). Many scholars claim that innovation is the main tool of entrepreneurship. Ducker, says that innovation is a systematic hunt for the changes as prospects for new ideas, products, or markets (Cromie, 2000; Utsch & Rauch, 2000). Like many scholars who did research on innovativeness, Brush et al. (2003) is of the view that innovation is the main

quality that distinguish entrepreneurs from managers. In the empirical study of Utsch and Rauch (2000), it has been observed that there is a main connection between venture performance and innovativeness. In the scholarly work of Thomas and Mueller (2000), innovativeness is regarded as a main character in defining the entrepreneurial profiling.

Innovativeness can be defined as new ideas, products, and introduction of new processes by the firm in order to engage itself in innovation. It is essential for the firms for the success and survival in competitiveness. While it is generally acceptable by all scholars that innovativeness is required for the business performance. But it is also essential to know the drivers of innovativeness and what mechanism should be used to operate the drivers for innovativeness to influence the firm's performance. The study conducted by Hult et al. (2004) examined the relation of innovativeness with the performance and organizational adaptation. They also assessed the learning orientation, entrepreneurial orientation, and the market orientation as the qualifications for the innovativeness. They further argue that openness towards the innovation is not directly related to entrepreneurial orientation because in innovativeness market entry is not required. The firms who do not have the ability to innovation can also practice their resources and invest time, but their knowledge cannot be transformed into practicality.

**H1.** Students inclined towards entrepreneurship have higher innovativeness score than entrepreneurially non-inclined students.

#### **2.4.2. Need for achievement**

The theory of McClelland and Mac Clelland (1961), need for achievement theory, is regarded as one of the most applied theories on entrepreneurship. The traditional definition of

this theory states that need of achievement is the stimulus that pushes the person to struggle for perfection and success (Sagie & Elizur, 1999). Strong need to achieve individuals are those who want to tackle problems by themselves, they also set targets and struggle hard to attain these goals through their own efforts, they perform higher than others and they have innovative sense for better ways to progress their performance (Hannu, 2000; Utsch & Rauch, 2000). Theory of need for achievement by Murrey, acknowledged the need for achievement as a basic need that impacts behavior, McClelland established the idea that high need for achievement inclines a young individual to seek out an entrepreneurial position to achieve most of the satisfaction that may be consequent from other kinds of positions (Entrialgo et al., 2000; Stewart Jr et al., 2003). Several comparative studies led us to believe that among non-entrepreneurs and entrepreneurs, it appears that need for achievement has a more significant relationship with entrepreneurship than any of the other characteristics mentioned in the entrepreneurship literature (Farsi et al., 2013; Hannu, 2000; Hansemark, 1998; Stewart Jr et al., 1999).

From the above literature on need for achievement it is perceived that the motive of achievement is primarily based on the hope of attaining something faster and in better way than anything else that was achieved in the past. The need for achievement is among the principle aim of an entrepreneur for entrepreneurial success. The motive to achieve occurred from the desirability of the person to achieve something. So, need for achievement and achievement motive are the process for striving and planning quality and excellence. According to the study conducted by Ryan et al. (2011) the importance of need for achievement is widely accepted and research is conducted by many researchers, but the focus is largely on developed countries. In developing countries, the importance of entrepreneurship and its relationship with need for achievement by entrepreneurs is hardly researched by policy makers. So, entrepreneurship

development faces hurdles in developing nations. The need for achievement can be defined as the desire to do something in a better way than others to attain sense of personal success. It is the ability to choose activities that hold attainment of maximum opportunity of personal achievement with the fear to fail. The literature on entrepreneurship argues that need for achievement among the potential university going entrepreneur is based on education, experience and training.

**H2.** Students inclined towards entrepreneurship have higher need for achievement score than entrepreneurially non-inclined students.

### **2.4.3. Locus of control**

Other widely researched trait in the entrepreneurship literature is locus of control (LoC). It is important to understand because as it is a variable to know whether a person will be able to control the events in one's life or not (Leone & Burns, 2000). Rotter (1966) through his research concluded that persons vary in terms how much responsibility they expect for their personal actions and perceive their behavior and its consequences. Individuals who have given more weightage to external LoC believe conditions and situations are beyond their immediate control that is fate, luck and other individuals are responsible for their performances across a variety of activities. In addition, people who believe in internal LoC are of the view that they themselves control events around them and are responsible for the consequences in their lives (Hansemark, 1998; Koh, 1996; Riipinen, 1994). So, scholars are of the view that entrepreneurs have an internal locus of control. Entrepreneurs who are seeking for new arenas and opportunities and always come up with innovative ideas are expected to be capable to have strong understanding that they must have the capability to control the events in their surroundings, that is what locus of control is all about. All the entrepreneurship literature gives the same idea about the LoC

(Hansemark, 1998; Koh, 1996; Mueller & Thomas, 2001; Utsch & Rauch, 2000). For instance, Gilad (1982) has done the empirical study and succeeded to distinguish unsuccessful and successful small business owners (Engle et al., 1997). Apart from that, Shapero's research reached the conclusion that non- entrepreneurs have comparatively lower locus of inner control than those who are entrepreneurs (Thomas & Mueller, 1998).

Locus of control can be defined as the belief of an individual that his personal traits can affect the outcomes. The belief of the individuals that they can control certain outcomes, or they hold certain traits which can justify the outcomes. The literature on entrepreneurship have discussed the relationship between locus of control and entrepreneurship in detail. Which they help of previous studies, universities can teach the importance of LOC, to cultivate the entrepreneurship among them. LOC is a multi-dimensional variable, so it can be study with respect to internal control, chance and powerful others. The 'internal control' is related to the ability of an entrepreneur to control events. 'Powerful others' is related to the ability of an entrepreneur to control interest, and 'chance' is related to the perception of the entrepreneur that the decision is controlled by the fate and environment. The literature on entrepreneurship also argues that supportive environment can shape the LOC of potential entrepreneurs which can affect them to be more successful in makes decisions and perception building, so universities should focus more on cultivating locus of control among students. Locus of control plays a great role in the research on entrepreneurship characteristics. Many researchers have concluded that new entrepreneurs have more locus of control than the new non-entrepreneurs such as managers.

**H3.** Students inclined towards entrepreneurship have higher Locus of control score than entrepreneurially non-inclined students.

#### **2.4.4. Risk taking propensity**

An individual's propensity to avoid risk or exhibit risk when confronted with risky situations is referred to as risk taking propensity. From the entrepreneurship literature it is evident that entrepreneurship has strong association with risk taking throughout the history. One of the most important literature in this context is Chantilon (1755), as he indicates through his scholarly work that the main difference among manager, employees and entrepreneurs is the risk-taking propensity (Entrialgo et al., 2000; Thomas & Mueller, 2000). His statement is based on the evidence that entrepreneur takes risk of loss and profit, which distinguish him from managers. In addition to this, due to the uncertain nature of environment, entrepreneurs also have to bear the risk associated with the career opportunities, family relations, financial wellbeing, psychic wellbeing and emotional state (Brockhaus Sr, 1980; Erdem, 2001; Hannu, 2000). Statements from the above scholars, indicates that an entrepreneur must be risk taker. In the entrepreneurship literature, the entrepreneur is differentiated from managers as he is characterized as having a higher propensity to risk taking than any of the other group (Cromie, 2000; Teoh & Foo, 1997; Thomas & Mueller, 2000).

Risk taking propensity among the entrepreneurs can be divided into three sub-levels- low, average, and high. Risk taking propensity among the entrepreneurs is essential characteristic among the entrepreneurs. Individuals who are inclined towards entrepreneurship tend to be more risk oriented than individuals who are not inclined towards entrepreneurship. But some studies negate this statement, according to these studies entrepreneurs become more aware about the entrepreneurial environment so they hold more business information and based on this information they make decisions. The available literature on entrepreneurship have included risk bearing as a distinctive characteristic between the functions of an entrepreneur and those of a

manager. Entrepreneurial risk taking can be categorized in three components: the perceived probability of failure for a specific startup, perceived consequences of failure, and the general risk-risk taking propensity of an individual who is inclined towards entrepreneurship. Based on the literature on entrepreneurship, the risk-taking propensity can be defined as the probability of getting rewarded with the success of a proposed situation, as this is required by an individual before for the consequences associated with failure. The alternative scenario is less reward but at the same time less harsh consequences than the proposed situation. So, entrepreneurially inclined students' needs to understand this definition of risk-taking propensity before starting new ventures.

**H4.** Students inclined towards entrepreneurship have higher risk-taking propensity score than entrepreneurially non-inclined students.

#### **2.4.5. Tolerance for ambiguity**

The state of uncertainty is mainly due to the unavailability of sufficient data. Thus, the tolerance if ambiguity is the quality to respond accordingly and positively in uncertain and ambiguous situations. If any individual responds to insufficient data and takes decisions confidently in this situation, then the tolerance of ambiguity in this state is considered to be high (Teoh & Foo, 1997). Contrary to that, individuals with low level of tolerance for ambiguity are likely to respond uncomfortably to unstructured and uncertain situations. So, persons with low level of tolerance for ambiguity always try to avoid such ambiguous situations. To understand the concept of tolerance of ambiguity in this context, it is the personal orientation of an individual in a decision-making state. Similarly, conservative managers are more likely to tolerate ambiguity ineffectively than entrepreneurial managers. Because, entrepreneurial one's face have the ability to bear the ultimate responsibility for their decisions (Entrialgo et al., 2000).



Uncertainty and risks are those elements of entrepreneurial behavior which needs original and innovative decisions from the entrepreneurs (Cromie, 2000; Teoh & Foo, 1997). The lack of clarity in decision making in these conditions creates further ambiguity Koh (1996) and Teoh and Foo (1997) have cited several empirical studies suggesting that the entrepreneurs have dominantly higher capacity to tolerate ambiguity.

**H5.** Students inclined towards entrepreneurship have higher tolerance for ambiguity score than entrepreneurially non-inclined students.

#### **2.4.6. Self confidence**

One of the important traits of entrepreneur is self-confidence. This characteristic is important because entrepreneurs always seek and attain demanding tasks. So, in order to achieve the tasks successfully it is important for them to be confident, if they had low confidence the demanding task be not have desired results. According to Cromie (2000), self-confidence is not a determinant of entrepreneurship rather it is the outcome. The entrepreneurship literature suggests that entrepreneurs hold higher level of self-esteem when compared with other groups (Koh, 1996; Robinson et al., 1991).

Self-confidence refers to the ability of an individual to do certain entrepreneurship tasks. The entrepreneurship literature is clear about the fact that individual who is more confident in making decisions can become an entrepreneur. Studies also argue that there are some predictors of self-confidence, named as learning culture, supervisor support, peer support and leadership. The existing literature has limited studies on the role of universities in nurturing the self-confidence among students. But the limited literature argues that the university support and

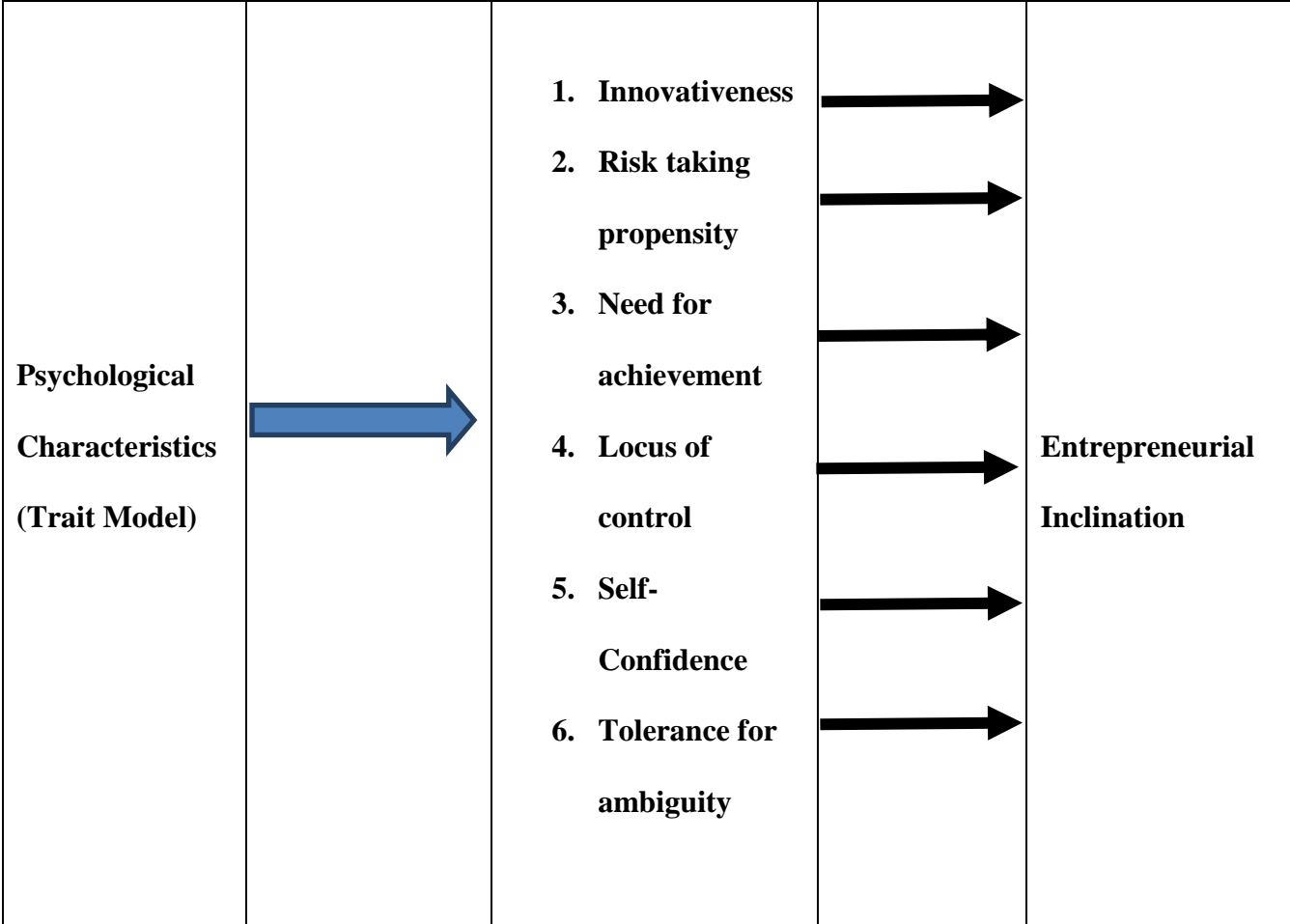
university environment contribute to enhancing the self-confidence of students that ultimately make them as a potential future entrepreneur.

**H6.** Students inclined towards entrepreneurship have higher self-confidence score than entrepreneurially non-inclined students.

## **2.5 Conceptual framework**

Based on the above entrepreneurial characteristics, the following theoretical framework has been diagramed. Our main statement is that the entrepreneurship characteristics can be learned through entrepreneurial education and training. The business student who attained business education and training are entrepreneurially inclined students because they are potential future entrepreneurs. The students who are non-inclined towards entrepreneurship does not have these characteristics, so they do not want to choose entrepreneurship as a career. Our hypothesis statements are based on the inclination of students towards entrepreneurship that states that entrepreneurially inclined students will have higher scores in these characteristics than non-business students.

Entrepreneurial Education/Training and relationship with entrepreneurial characteristics.



*Figure 1:* Theoretical framework diagram

## **CHAPTER 3**

### **METHODOLOGY**

This chapter offers the design opted to collect the data and the mechanism for how the sample was selected. This chapter also gives an overview of how the questionnaire was conducted.

The target population of this study is university students from Gilgit Baltistan studying at various universities of Pakistan. The sample size of this study is 255 university going students. From the previous entrepreneurial literature, we came to know that a significant number of university students are potential entrepreneurs in developing and developed countries, as mentioned by (Thomas & Mueller, 2000). The locale of this study is Gilgit Baltistan, and this research work is conducted on the undergraduate students from this area studying all over the world.

For this study six psychological characteristics are chosen to check the entrepreneurial profile of students named as: tolerance for ambiguity, need for achievement, innovativeness, self-confidence, risk taking propensity, and locus of control. The study is interested to check the entrepreneurial profile of students based on these characteristics to know the importance of entrepreneurial education and training. Whether or not entrepreneurial education and training is required to enhance the entrepreneurial tendency among the students. The questionnaire consisted of a main general question: “What are you planning to do after graduation?” The students who showed interest in starting entrepreneurship as a career are classified as “entrepreneurially inclined students” and the students who said that they want to opt something other than entrepreneurship were classified as “entrepreneurially non-inclined students”.

The first part of questionnaire consisted of questions related to demographic profiling. The second part of questionnaire consisted of questions related to 6 entrepreneurial characteristics. This was done to examine traits of both entrepreneurially inclined and non-inclined students and run a comparative analysis. For the said purpose students were divided into two groups i.e., entrepreneurial inclined students and entrepreneurial non-inclined students each. To sum up, a total of 39-item questionnaire was distributed among the students, the items were related to six entrepreneurial characteristics, demographic variables and entrepreneurial inclination.

### **3.1 Study Design**

This thesis work is based on empirical data gathered through quantitative research. Primary data is collected from the university level students. Close-ended questionnaire was distributed for the purpose of data collection. This study analyzed the entrepreneurial traits of university going students (Business) from Gilgit-Baltistan region.

The focus of this thesis work is to analyze the entrepreneurial traits of the graduating students. With the help of entrepreneurial literature, underlying statement that graduating students are among the potential entrepreneurs has been confirmed. We have adopted items for our questionnaires from well reputed articles. The presumption of this study is that certain entrepreneurial characteristics urge students to become entrepreneurs. For the said purpose, a total data sample of 255 students was collected through questionnaires. This aim of this research is to check the entrepreneurial profile of students based on psychological characteristics. Other than that, to find out the career options and inclinations of the students from Gilgit Baltistan who are currently studying in different universities of Pakistan. So, questionnaires were distributed among the students of Gilgit Baltistan who were based in different universities all over Pakistan.

Most of the students out of total respondents were the students of three universities, namely: Quaid-I-Azam university Islamabad, Karakorum International University Gilgit, and Pakistan Institute of Development Economics (PIDE) Islamabad.

### **3.2 Data Collection Method**

To conduct the empirical part of this thesis the quantitative method is used. Thesis work is interested to collect primary data. The collection of the data was done using convenient sampling, i.e., used a questionnaire as a tool of collecting data and distributed among the respondents who were easier to reach. Liker scale also known as the satisfaction scale was used to collect the data. A series of questions were asked related to entrepreneurial characteristics from the respondents followed by 7 point-scale options.

### **3.3 Self-Administered and close-ended Questionnaire**

In general, there are two types of questionnaires to collect the primary data: interviewer administered questionnaire and self-administered questionnaire. For this research work author has handed self-administered questionnaires. The questionnaire is composed of close ended questions. To gather maximum number of responses the author has taken into account of geographical constraints i.e., university students from Gilgit-Baltistan studying all over Pakistan. To collect responses for the self-administered questionnaire the hard distribution of questionnaires to all the respondents was a bit difficult. So, author has distributed a major chunk of questionnaires through Internet. The internet facility was helpful because it was not time taking and was economic. That's the reason the author has found internet more convenient for collection of the data.

### **3.4 Questionnaire Design**

The questionnaire was designed to incorporate all the variables presented in the theoretical framework. The questionnaire is consisted of two main parts. Part one includes the basic information about the respondents i.e., name, university name, gender, age, education level, career inclination. The most important question of part one was, “What career you are going to choose after degree?”.

The second part of this questionnaire consisted of questions which were adopted from previous empirical studies. In total there were 39 questions for all 5 constructs. So, the second part of questionnaire consisted of 6 constructs and 39 items. Liker scale also known as satisfaction scale was used to collect the responses. A 1-7 points scale was taken to collect the responses.

### **3.5 Definition of the Research Sample**

The definition of the research sample is an important part in any research work because it plays a pivotal role to find out sufficient information which will eventually allow us to do a detailed analysis of the topic of our thesis. In order to achieve the aims and objectives of this thesis work, finding the relationship between the entrepreneurial characteristics and the role entrepreneurial education and entrepreneurial characteristics, we applied a self-administered questionnaire strategy as a data collection tool.

### **3.6 Sampling Method**

It is not possible for the researchers to investigate the whole population when the population is very large. So, the sampling method remains the only option for the researchers in this case. The research sample consists of two types i.e., probability sampling and non-

probability sampling. We have chosen non-probability sampling because our approach for this research is non-mathematical. Considering the nature of this research work convenience sampling was done on order to collect the data.

### **3.7 Size of the Sample and criteria for selection**

The sample size of this thesis work is consisted of 255 responses. The questionnaire was handed to the students of Gilgit Baltistan studying in different parts of Pakistan. In order to collect gender based inclusive data, questionnaires were distributed among males and females in equal proportion.

### **3.8 Locale of the Study**

The area of Gilgit-Baltistan was chosen for this study. According to the study conducted by Riaz et al. (2018) Gilgit Baltistan has a geographical area of 28,174 sq. miles. The population of Gilgit-Baltistan stands at 1.44 million with a density of 17/ square kilometers. Due to lack of higher education institutes many students travel to big cities for higher education. Generally, the entrepreneurial mindset among university students is less in this region as compared to other provinces of Pakistan, but in recent days more students are inclined towards business ventures. Due to high unemployment among graduate students many students are thinking to enter into new fields such as entrepreneurship.

### **3.9 Techniques for Data Analysis**

The gathered data from the respondents was analyzed using IBM SPSS software. The Cronbach's Alpha is tested to check the reliability and consistency of the data. Other than that correlation analysis test is run on the data. This thesis work aims to examine the mean differences in the variables on the basis of inclination and non-inclination towards



entrepreneurship of the students. For the said purpose, hypothesis testing is conducted empirically by using independent samples t-test. Our hypothesis is that business students who have studied business education will score high against the non-business students.

### **3.10 Scale and Research Instrument**

From the relevant entrepreneurship literature, the questionnaire with constructs was adopted. The form was then framed on Likert scale ranging from rating 1 to rating 7 (lowest to highest). The questionnaire consisted of parts. In the first part I have included the questions related to demographic profiling were asked. In the first part I have also included questions to find out the inclination of the respondent towards entrepreneurship. For instance, I have included a question “What career plan you have decided?”. The options for this question were “I am planning to adopt entrepreneurship as my career”, “I am planning to work as a salaried employee in private sector”, and “I am planning to work as a salaried employee in public sector”. The second section of the questionnaire consists of questions related to the six constructs to measure the characteristics. These characteristics are believed to discriminate between non-entrepreneurial and entrepreneurial inclination. The second part consisted of 39 items, with 8 items for innovativeness, 6 items for tolerance for ambiguity, 5 items for risk taking propensity, 8 items for locus of control, 6 items for self-confidence and 6 items for need for achievement. The students were asked to select their degree of disagreement and agreement with the given statements on a seven-point Likert scale. Some of the questions/statements were reverse-coded with the other questions to minimize the possibility of response set bias.

The first construct, need for achievement, is consisted of six items and these items were the adapted from the scale used by Chang et al. (2007). The second construct used in this thesis work is Locus of control which was sub-scale item in Rotter (1966) 29 items scale used by

(Thomas & Mueller, 2000). Although some other items were also used in some studies but Rotter's scale is widely acceptable scale. The items for tolerance for ambiguity were adopted from the (Budner, 1962) test. Innovativeness items were adopted from the work of Jackson Personality Inventory (Jackson, 1994). The self-confidence items were first used by (Koh, 1996).

### **3.11 Ethical Consideration**

Ethical consideration is regarded the important part of any research work. According to Bryman and Bell (2015), researchers should consider certain points of ethical consideration principles in their research. In order to address ethical considerations these principles were incorporated in this dissertation.

The participation of respondents in any research must be on voluntary basis. Similarly, the respondents in this research were volunteers. They were informed that they have the right to withdraw from this research at any stage.

The participation of respondents must be based on informed consent. In this thesis work, necessary information about the implications and assurance of participation in this thesis work was provided. Respondents were given free hand to participate without the exercise of coercion or pressure.

The items in questionnaire must not contain unacceptable, offensive and discriminatory language against any group. Similarly, the questionnaire handed to the respondent was scrutinized to check to ensure it does not hurt the sentiment of the participants.

Anonymity and privacy of the participants is also an important part to consider. Similarly, in this thesis work the respondents were given surety that their privacy is of a paramount importance in this research.

The acknowledgement of the works of scholars and authors used in the thesis is also important. So, for the acknowledgement of the literature APA referencing system was used in this thesis work.

## **CHAPTER 4**

### **DATA PRESENTATION AND FINDINGS**

This chapter consists of the results of the quantitative data from six main entrepreneurial characteristics and their relationship with entrepreneurial education and training in Gilgit-Baltistan. In this chapter the author has displayed the results of the quantitative analysis from the adopted questionnaire. The questions in the questionnaire focused on questions related to entrepreneurial inclination of the university students.

The main aim of this chapter is to gather the quantitative data from questionnaire survey. Our questionnaire was distributed among the students through online sources such as Google Forms. The total number of valid outputs were 255. After collecting the data, the SPSS software was used to analyze the responses and draw them into figures through using excel software.

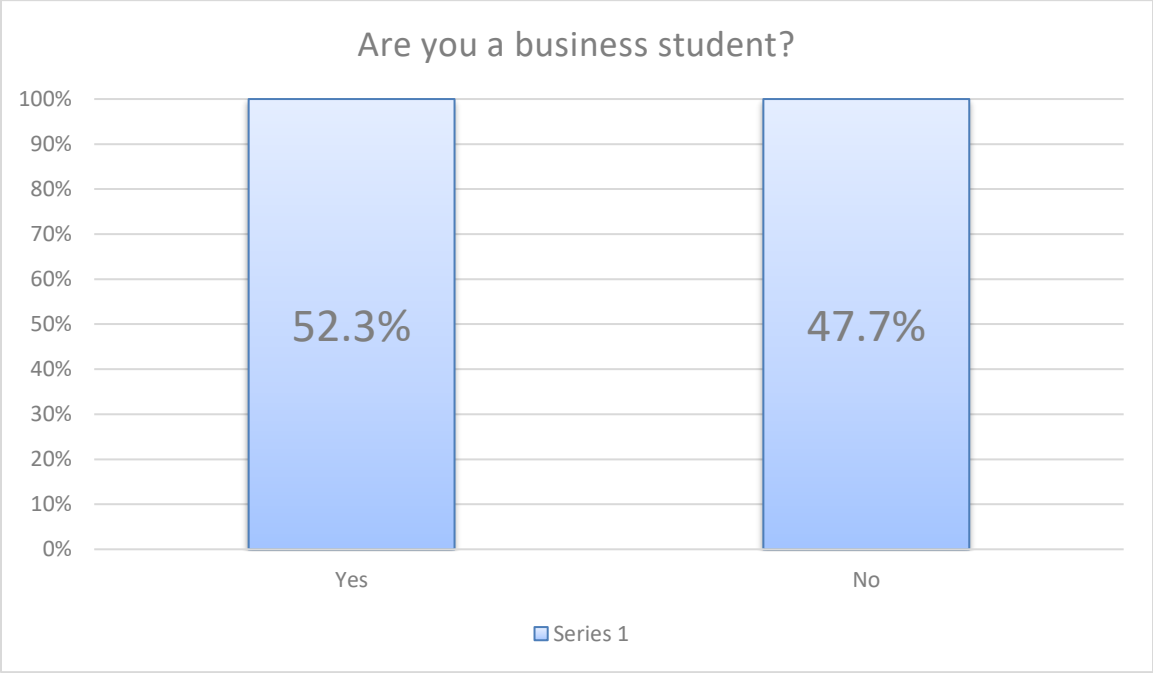
#### **4.1 Data presentations and the elementary situation of the responses**

The total number of the constructs were six, also 39 questions were adopted to investigate the situation of the respondents. Apart from these questions, some basic questions related to the general information of the students were also asked, these questions inquired about the age, educational background, gender, career inclination and current educational status of the respondents. The key questions are “Are you a business student?” and “What career option you are planning to choose after graduation?”. It is also noteworthy that someone who has studied business related degree are assumed to be business students. Based on this question we have distributed the respondents into two groups, to compare the entrepreneurial inclination of both the groups. Based on the previous studies, author has assumed that the business students are potential entrepreneurs because they have tendency to start new business ventures. So, business

students are entrepreneurially inclined students and non-business students are non-inclined students in this empirical study.

**Question:** “Are you a business student?”

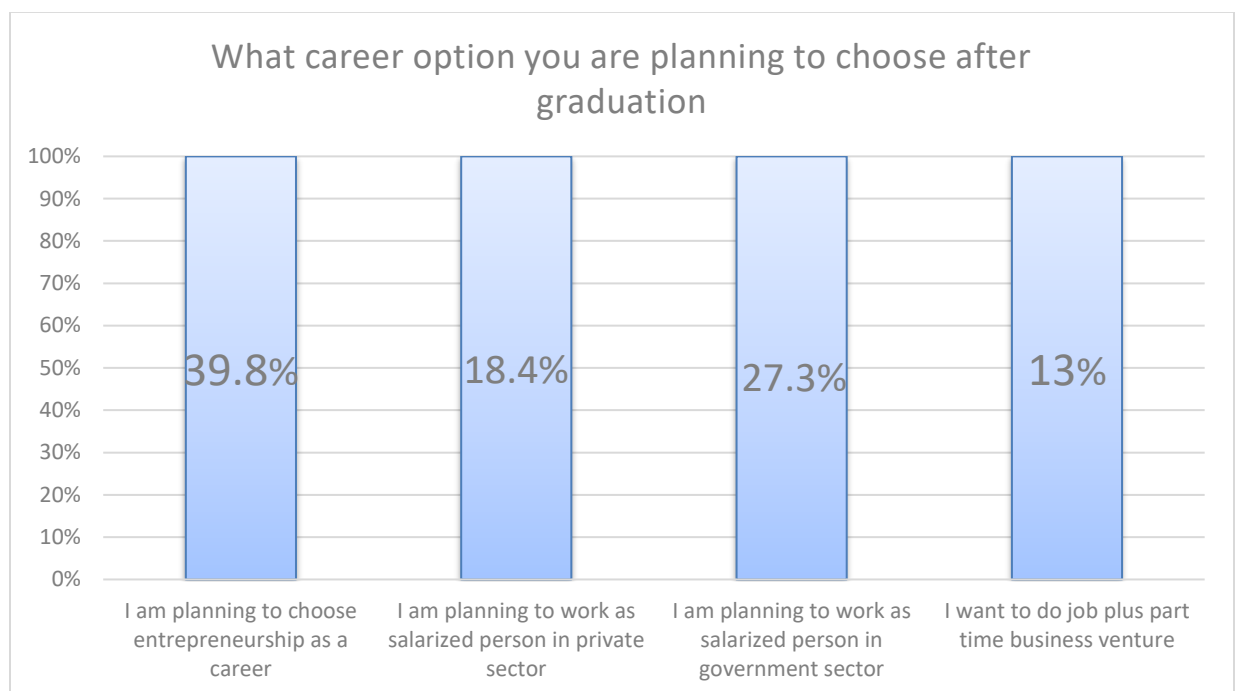
Based on the above question, the author has distributed the respondents into two groups named as entrepreneurially inclined students and entrepreneurially non-inclined students. The main statement is that business students are more inclined towards entrepreneurship than non-business students. Hypothesis testing is done on the basis of this statement.



**Figure 4.1:** Results from inputs given by students

**Question:** “What career option you are planning to choose after graduation?”

The above question is also important because it also shows the inclination of students towards their career. 38.8% respondents are planning to choose entrepreneurship as their profession. Another 13% want to choose entrepreneurship as a career but as a part time profession apart from doing a job. The remaining respondents planning to do jobs in private and public sector.



**Figure 4.2:** Results of question related to career planning

**Table 4.1:** Adoption sources of questionnaire items

Construct name with items	Source of adoption
<p><b>Risk taking propensity (Five items)</b></p> <ol style="list-style-type: none"> <li>1. For higher returns I am willing to take high risks.</li> <li>2. If the profit is small, I do not care as far as my profit is constant and assured*</li> <li>3. I can move into new undertakings that I know nothing about.</li> <li>4. I prefer to avert any risky situation by all means*</li> <li>5. I will always choose a business which gives high profit for high risks than a job that is secured but with steady salary.</li> </ol>	Koh (1996)
<p><b>Innovativeness (Eight items)</b></p> <ol style="list-style-type: none"> <li>1. When I get chance, I surprise people with my novel ideas.</li> <li>2. I always like work that has original thinking.</li> <li>3. I will choose a job that requires practice and skills than innovativeness *</li> <li>4. I more satisfied in mastering a new skill than come up with new idea*</li> <li>5. I usually experiment to do the same thing in various ways</li> <li>6. I do the job in a way I was taught to do so*</li> <li>7. Everything is unaccomplished unless if you stick to some basic rules*</li> <li>8. Sometimes I enjoy doing things that I am not supposed to do and I enjoy doing things against the rules</li> </ol>	Jackson (1994) Personality Inventory
<p><b>Locus of control (Eight items)</b></p> <ol style="list-style-type: none"> <li>1. My own actions is determining my life</li> <li>2. My life is controlled by me</li> <li>3. I have the feeling that what happens in my life is due to people around me in powerful positions*</li> <li>4. I feel that to great extent my life is controlled by accidental happenings*</li> <li>5. I usually work hard so I get what I want</li> <li>6. I am lucky that is why I get what I want*</li> <li>7. My success is dependent on being lucky enough to be at right place at right time*</li> <li>8. I am successful because of my abilities</li> </ol>	Levenson (1974)
<p><b>Need for achievement (Six items)</b></p> <ol style="list-style-type: none"> <li>1. Achievement is more important than material or financial reward</li> <li>2. Achieving the aim or task gives greater personal satisfaction than receiving praise or recognition</li> <li>3. Financial reward is regarded as a measurement of success*</li> <li>4. Achievement-motivated people constantly seek improvements and ways of doing things better</li> <li>5. Achieving the aim and task brings more financial reward than praise or recognition*</li> <li>6. Achieving the aim and task is regarded as a measurement of success</li> </ol>	Chang et al. (2007)
<p><b>General self-efficacy (Six items)</b></p> <ol style="list-style-type: none"> <li>1. I will achieve all the goals I have set for myself</li> <li>2. I am always certain that I will achieve all the difficult tasks I will face</li> <li>3. I feel confident that I will perform all the different tasks effectively</li> <li>4. Even if the tasks are difficult to do, I will still perform them effectively</li> <li>5. I can do my tasks in great manner when compared to others</li> <li>6. Generally, I have the sense that I can achieve outcomes that are important for me</li> </ol>	Koh (1996)
<p><b>Tolerance of ambiguity (Six items)</b></p> <ol style="list-style-type: none"> <li>1. I like to engage around with new ideas, even if they don't give me the desired outcomes I need</li> <li>2. Practically every problem has a solution</li> <li>3. If I notice that a problem has no solutions then the problem has little attraction to me*</li> <li>4. I only want to work on a problem if the problem has a possibility of coming out of problem or have ambiguous answers*</li> <li>5. I can adapt the possibilities of unpleasant social situations</li> <li>6. I can get anxious if I have no options to control a social situation*</li> </ol>	Kirton (1981)

## 4.2 Descriptive Analysis

Out of the total 270 administered questionnaires, 258 were handed back to me by respondents. Due to some discrepancies further 3 questionnaires were further eliminated. So, our final sample size consisted of 255 respondents. Out of the total students, 158(61.9%) students were recently graduated, and 97(38.03%) were in the final year of the degree. Most of the students were from Quaid-I-Azam university Islamabad, PIDE Islamabad and Karakorum University Gilgit. The prime objective of our study was to collect the data of business and non-business students. To do so the questionnaires were distributed to students with different backgrounds. Out of them, 52% had a business background i.e., they are studying/completed a degree that consisted of at least 4 business studies subjects. The remaining 48% had non-business background. Out of the total sample size 102 students have decided to choose entrepreneurship as a career. 47 have shown interest to join private sector as an employee. 70 or 27% of the total students have decided to opt salaried jobs at public sector. On the other hand, 32 or 12% students want to start a job plus a business start-up at the initial stage of their career.

As mentioned above the total respondents in this research are 255. Out of the total students 134 showed inclination towards entrepreneurship while the remaining students have no inclination towards entrepreneurship. Out of 255 respondents 90 are females and remaining 165 respondents are male. In the first part of the questionnaire, a question related to any entrepreneur in the family was also asked to find out if family member occupation influence the student's decision or not. A total of 103 respondents' fathers are occupied with their personal businesses. This also shows that the father's occupation or family culture also influences the decisions of their children. So, in this case the entrepreneurial inclination of students is also affected by father's occupation as father is also seen as a role model in our cultural norms. This research also



shows that there is a low rate of female entrepreneurs compared to male. Females prefer salaried jobs over their own start-ups. This behavior is also influenced by Pakistan's family structure.

### **4.3 Cronbach's alpha reliabilities**

To measure the internal consistency Cronbach Alpha is used i.e., how closely the items are related as a group. To examine the reliabilities of the subscales and to examine the internal consistency, the Cronbach's alpha is used. When the test was conducted, reliabilities of the subscales have been more than 0.70. Thus, this shows that there is an internal consistency among all the subscales and are measuring the same concept. The items of risk-taking propensity show an internal consistency of 0.754 which is acceptable. Other than that, the 8 items of innovativeness have a reliability and consistency of 0.821 which is quite high and reliable. The 8 items of subscale locus of control have reliability score of 0.784 which is also high and reliable. The items in subscale need for achievement have the reliability score of 0.811 which is also accepted. The items included in variable self-confidence have the internal consistency of 0.788, which is also high. Other than that, the items included in the tolerance of ambiguity have the internal consistency score of 0.721 which is also more than 0.7, which is the level for consistency and reliability among the items in subscales/variables. The Cronbach's Alpha reliability score of all our variables is more than 0.70, that shows there is reliability among the data gathered for each of the item in our subscales. Further all the items in the variables are consistent and there are no issues regarding the consistency in our data.

**Table 4.2:** Cronbach's Alpha reliabilities

<b>Variable</b>	<b>Indicators</b>	<b>Cronbach Alpha</b>
Risk Taking Propensity	RTP_1 RTP_2 RTP_3 RTP_4 RTP_5	0.754
Innovativeness	Inno_1 Inno_2 Inno_3 Inno_4 Inno_5 Inno_6 Inno_7 Inno_8	0.821
Locus of Control	LoC_1 LoC_2 LoC_3 LoC_4 LoC_5 LoC_6 LoC_7 LoC_8	0.784
Need for Achievement	Acv_1 Acv_2 Acv_3 Acv_4 Acv_5 Acv_6	0.811
Self-confidence	Sc_1 Sc_2 Sc_3 Sc_4 Sc_5 Sc_6	0.788
Tolerance of ambiguity	Amb_1 Amb_2 Amb_3 Amb_4 Amb_5 Amb_6	0.721

#### **4.4 Correlations**

Correlation analysis refers to the level of relationship between two variables. Through correlation analysis, we can determine whether there is strong, or high correlation among the

subscales or not. Contrary to that, when the relationship between the subscales/variables is low, or weak we can state that there is hardly any relationship among the variables. Data analysis for this study was conducted using statistical analysis tool SPSS. For the correlation analysis, Pearson r is used for this study, because it is widely used type of correlation coefficient (Crossman, Ashley. 2020, August 26).

In this part of analysis, the six entrepreneurship traits are converted into subscales. Other than that, all related calculations such as reliability check, correlation values, mean and standard deviation values are calculated. All these values represent a demonstration of valuable correlation among the subscales. The results of correlations are shown in the Table III. Correlation analysis was tested and the results of correlation showed that the variables are closely linked to each other and are correlated with each other at 0.01 level. Among the 6 characteristics, the highest correlation was found between innovativeness and tolerance for ambiguity at 0.64. The values that represent inter scale correlation should be between +1 and -1. In the case of tolerance for ambiguity and innovativeness the correlation is highest, so these two subscales exhibit the strongest correlation among the subscales. In addition to that the lowest correlation was empirically observed between risk taking propensity and general self-confidence at 0.322. So, this result exhibit that the association between general self-confidence with risk-taking propensity is lowest when the statistical data acquired for this research study was applied. The empirically observed data shows that risk taking propensity and innovativeness have correlation level of 0.512. The correlation result between risk taking propensity and innovativeness is positive and higher because the significance level of 0.1, and the correlation level is  $0.5 > 0.1$ . Similarly, the correlation between locus of control and risk-taking propensity is 0.421, which is also high keeping in mind the significance level i.e., 0.1. In addition, the

correlation between sub-scales risk taking propensity and need for achievement is 0.355 which is also significant but comparatively lower than the other subscales. The correlation between risk-taking propensity and the self-confidence is the lowest than any other subscale at 0.322 but it is still significant. The correlation between subscales risk-taking propensity and tolerance for ambiguity is at 0.411 which is also significant. Furthermore, the correlation analysis result between innovativeness and locus of control is at 0.511, which is high. The correlation level between need for achievement and innovativeness is at 0.491 which is also significant. Similarly, the correlation level between innovativeness and tolerance for ambiguity is at 0.641 which is also significant. Correlation level between innovativeness and self-confidence is at 0.462 which is also positive and significant. The correlation level between self-confidence and locus of control is at 0.42 which is also positive and both the subscales are correlated. Similarly, the correlation level between locus of control and need for achievement is 0.38 which says that both the subscales are significant. The empirical results of correlation level between locus of control and tolerance of ambiguity shows that both have correlation level of 0.48 which is significant. Similarly, the level of correlation between self-confidence and need for achievement is at 0.51 which is also significant. The result of correlation between tolerance for ambiguity and need for achievement is at 0.412. At last, the correlation between tolerance of ambiguity and self-confidence is at 0.391 which is also significant.

**Table 4.3:** Correlations among variables

<b>Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Risk taking propensity</b>	<b>1</b>					
<b>Innovativeness</b>	0.512**	<b>1</b>				
<b>Locus of control</b>	0.421**	0.511**	<b>1</b>			
<b>Need for achievement</b>	0.355**	0.491**	0.38**	<b>1</b>		
<b>General self-confidence</b>	0.322**	0.462**	0.42**	0.51**	<b>1</b>	
<b>Tolerance of ambiguity</b>	0.411**	0.641**	0.48**	0.412**	0.394**	<b>1</b>

**Note: \*\*Significance level for correlation is 0.1**

**Table 4.4:** Mean and S.D of variables

<b>Variables</b>	<b>Mean of potential entrepreneurs</b>	<b>S.D of potential entrepreneurs</b>	<b>Mean of non-entrepreneurs</b>	<b>S.D of non-entrepreneurs</b>
<b>Risk taking propensity</b>	4.9	0.64	2.3	0.29
<b>Innovativeness</b>	4.6	0.71	2.6	0.31
<b>Locus of control</b>	4.5	0.7	2.48	0.34
<b>Need for achievement</b>	4.8	0.65	2.7	0.4
<b>General self-confidence</b>	4.33	0.61	4.25	0.59
<b>Tolerance of ambiguity</b>	4.66	0.63	2.5	0.28

### **4.5 Hypothesis Testing**

This thesis work aims to examine the mean differences in the variables on the basis of inclination and non-inclination towards entrepreneurship of the students. For the said purpose, hypothesis testing was empirically conducted by using independent samples t-test. Our hypothesis was that business students who have studied business education will score high against the non-business students. On the basis of the results H1 was accepted because business students who are inclined towards entrepreneurship have shown higher risk-taking propensity towards entrepreneurship as compared to non-business students who according to our hypothesis

were non-inclined students. Our H2 was that students who have attained entrepreneur education will score more in innovativeness than students who have not taken business education. On the basis of the t-test, the hypothesis 2 was also accepted as their score was more than non-business students. H3 said that, students who have attained business education and training will score more than non-business students in the locus of control. Based on the results of the t-test our H3 was also accepted. In addition to that, H4 was that the students who are entrepreneurially inclined will score more in need for achievement than the students who are not entrepreneurially inclined. Based on the empirical evidence our H4 was also accepted. On contrary to the previous hypothesis, H5 was rejected because in terms of self-confidence the entrepreneurially inclined and non-inclined students have scored equally. So, H5 in our case is declined as self-confidence does not requires business education to start new ventures according to our data. In addition to this, H6 was that business inclined student will score more in term of tolerance for ambiguity than the students who are not inclined towards entrepreneurship. Based on the t-test score H6 was accepted as students who attained business education had high tolerance for ambiguity than the students who have not attained any business education. The below table shows the results of the hypothesis testing.

**Table 4.5:** t-value and p-value testing results

<b>Variable Name</b>	<b>N</b>	<b>t-value</b>	<b>p-value</b>
<b>Risk taking propensity</b>	255	2.51	0.023
<b>Innovativeness</b>	255	2.44	0.006
<b>Locus of control</b>	255	2.7	0.04
<b>Need for achievement</b>	255	2.11	0.007
<b>General self-confidence</b>	255	1.1	0.23
<b>Tolerance of ambiguity</b>	255	2.3	0.007



## CHAPTER 5

### DISCUSSION AND CONCLUSION

#### 5.1 Discussion

This section of discussion comprises the discussion and analysis on the basis of theories presented in literature and on the exhibited results of our quantitative data. Other than that, the analysis of the acquired data gives the answers to the research questions which were raised in this study.

The model used in this thesis is psychological entrepreneurial model or simply known as trait model. The model was used with the purpose to inspect six entrepreneurship characteristics commonly known as risk-taking propensity, locus of control, innovativeness, need for achievement, tolerance for ambiguity and self-confidence. As mentioned before these traits are essential to carry by potential entrepreneurs, so the intention of this thesis is to check whether the students who are inclined towards entrepreneurship holds these characteristics or not. Other than that, the intention of this work is to do a comparison between entrepreneurially non-inclined and inclined students on the basis of these characteristics. As the entrepreneurship literature suggest that these traits are essential features of entrepreneurs, and each characteristics gives the measurement of entrepreneurial phenomena therefore it is also understandable that these characteristics have some degree of interrelatedness among each other. For that purpose, the correlation analysis was conducted and the results shows that they have somewhat high correlation among each other. Furthermore, t-test was conducted to differentiate the students with higher inclination towards entrepreneurship from others. In addition, the students were divided into two groups to conduct hypothesis testing. The students were divided into two groups

based on the question included in questionnaire which was related to entrepreneurial inclination. Results from the hypothesis testing showed that students who are inclined towards entrepreneurship are more likely to take more risks than students who are not inclined towards entrepreneurship. Similarly, students who are inclined towards entrepreneurship are more innovative than the students who are not prone to start their own business. In addition, the inclined students are also motivated to achieve high in terms of business-related activities and have more tolerance towards unfavorable and uncertain situations. In terms of self-confidence both entrepreneurially inclined and non-inclined students had similar results in our case, but it may vary in other geographical boundaries. The main reason for indifference because both inclined and non-inclined have self-belief in their own abilities and skills. So, out of six characteristics, in 5 students inclined towards entrepreneurship have more score than students who are not-inclined. In our data set, 102 students were planning to start their own ventures, another 33 students agreed that they also want to choose entrepreneurship but were not sure to start it as a career. So, out of 255 respondents a pretty high number of students are planning to choose entrepreneurship as a career. This significant figure of students may be because government of Pakistan has launched several business-oriented programs to encourage youth towards entrepreneurship. Other reasons could be that, in Pakistan youth don't have too many options to choose in terms of underemployment. Lack of skill sets to excel in private sector and underemployment are also reasons. Another reason is that youth also prefer to become their own boss.

The total respondents were 255 students, out of them around 90 were females and out of them 23.4 percent females were inclined towards starting their own ventures. This is a high percentage keeping in mind the overall social setup of our family system as Pakistani society is a

male dominated society. Also, a significant number of students in this study were acquiring business related degrees so this is also a big reason for higher number of students inclined towards entrepreneurship.

This thesis consisted of two research objectives. Firstly, to explore the entrepreneurial profile of university students on the basis of psychological trait model which states that some traits of entrepreneurship can be enhanced through entrepreneurship education and training. The first objective was addressed through the psychological trait model which consisted of 6 entrepreneurship characteristics. Scholars argued that psychological entrepreneurship traits can only be enhanced through entrepreneurship education and training. So, the aim of this work was to check this assumption empirically. For the said purpose, questionnaires were distributed among the university going students. The students were divided into two groups. Students who were planning to choose entrepreneurship as a career were separated from students were not planning to choose entrepreneurship as a career. The questionnaire consisted of questions related to 6 characteristics which must be present in an entrepreneurially inclined student. In total 38 questions were asked. The results of data showed that students who were entrepreneurially inclined scored high in terms of 6 entrepreneurship characteristics than non-inclined students. The score was equal in terms of innovativeness among inclined and non-inclined students. So, our first objective of this thesis was achieved as the profile of university students was checked. The results say that entrepreneurship education and training is important to foster entrepreneurship inclination among the students.

The second aim of this thesis work was to analyze the profile of the students and devise a nationwide plan for entrepreneurship education and training. The thesis work has given a road map for universities, students and government to encourage students to become entrepreneurs.

The road map to enhance entrepreneurship among potential entrepreneurs can only be done through entrepreneurship education and training. The region of Gilgit-Baltistan lacks opportunities due to absence of private sector. The university graduates only rely on government jobs. But in recent years due to high education rates the no of graduate students are more than the number of available jobs in government sector. This gap between demand of jobs and actual jobs advertised per year has mounted the unemployment rate among graduated. So, in the absence of private sector and limited availability of government jobs the only way out to control the unemployment rate is to make students their own bosses. This can only be done by fostering entrepreneurship education and training among them. With the available resources this thesis work has outlined a road-map to decrease short-comings and foster entrepreneurship.

There were 3 research questions in this thesis work. The first research question was “Do entrepreneurially inclined students score more in terms of psychological traits than non-inclined students?” The answer to this question from our empirical findings is yes. The findings showed that out of six entrepreneurial characteristics, inclined students have scored more than non-inclined students in 5 characteristics. The second research question of this research was “Is there any importance of entrepreneurial training and education to boost and encourage entrepreneurship?”. From the empirical evidence it has be observed that students who studied business related subjects are potential future entrepreneurs. Our findings also endorse this claim because entrepreneurially inclined students who were business students have higher percentage than non-business students. The third research question of this thesis stats that “Do entrepreneurship skills must need to be taught or they persist among other students who do not study it?”. The answer to this question is yes, because as the findings stated that inclined students who studied entrepreneurial education have scored more than students who have not studied

entrepreneurial education. So, in the case of this research work entrepreneurial skills (psychological characteristics) must be taught to foster entrepreneurship among potential future entrepreneurs (business students).

## **5.2 Conclusion**

*This section will present the analysis, empirical findings and conclusions in this thesis work that gives answers to the questions in this study.*

The objective of this thesis work was to examine the role of entrepreneurial education and training among the university students from Gilgit Baltistan. For the said purpose 6 entrepreneurial characteristics were checked on the students by comparing entrepreneurially inclined students and entrepreneurially non-inclined students. The results of the analyses exhibited that entrepreneurially inclined students have scored more in 5 entrepreneurial characteristics out of 6 characteristics. The results have indicated that entrepreneurial education and training is important to enhance the skills required for starting new ventures.

Through the literature of entrepreneurship, we concluded that certain entrepreneurial characteristics are important for a potential future entrepreneur. For the said purpose this study was conducted using two group of students namely, entrepreneurially inclined students and entrepreneurially non-inclined students. A question was asked at the beginning of the questionnaire which asked about the entrepreneurial interest among the students. Students who said they want to choose entrepreneurship as their career were listed as entrepreneurially inclined students and those who said they will choose different path than becoming entrepreneur were categorized as entrepreneurially non-inclined students. After gathering the data, tests were conducted in order to find out that entrepreneurial traits are required for a potential entrepreneur

or not. For the said purpose Cronbach's Alpha was checked to know whether our data is reliable or not. The reliability test showed that the gathered data is consistent and reliable. After that, mean and standard deviation was found out for both the groups. Other than that, the Pearson r, correlation analysis was done to find out the relationship among the subscales/variables. Correlation analysis was tested and the results of correlation showed that the variables are closely linked to each other and are correlated with each other at 0.01 level. Among the 6 characteristics, the highest correlation was found between innovativeness and tolerance for ambiguity at 0.64. After the correlation analysis, hypothesis testing was conducted to examine the mean differences in the variables on the basis of inclination and non-inclination towards entrepreneurship of the students. For the said purpose, hypothesis testing was empirically conducted by using independent samples t-test. Our hypothesis was that business students who have studied business education will score high against the non-business students. Out of six hypothesis statements five were accepted because entrepreneurially inclined students scored high score than non-inclined students. On contrary to the previous hypothesis, H5 was rejected because in terms of self-confidence the entrepreneurially inclined and non-inclined students have scored equally. So, H5 in our case is declined as self-confidence does not require business education to start new ventures according to our data. In addition to this, H6 was that business inclined student will score more in terms of tolerance for ambiguity than the students who are not inclined towards entrepreneurship. Based on the t-test score H6 was accepted as students who attained business education had high tolerance for ambiguity than the students who have not attained any business education. The below table shows the results of the hypothesis testing. Only H5 was rejected because the scores of inclined and non-inclined students were same in terms of self-confidence trait.

This thesis work was based on the psychological characteristics of entrepreneurship. This school of thought has six characteristics of entrepreneurship named as innovativeness, need for achievement, locus of control, self-confidence, tolerance for ambiguity, and risk-taking propensity. As discussed in previous chapters, the sub-scales measurement was done through different dimensions. Furthermore, the correlation test of the sub-scales in this empirical study showed statistically significant. The results obtained from t-test exhibited that students who were inclined towards entrepreneurship are more tolerant towards ambiguity, innovative, they are more motivated to achieve, and have more locus of control than the students who are not inclined towards entrepreneurship. Contrary to that, regarding the self-confidence the results showed that there is not a big difference among the non-inclined and inclined students.

## **CHAPTER 6**

### **POLICY RECOMMENDATION, RESEARCH LIMITATIONS AND FURTHER RESEARCH**

#### **6.1 Policy Recommendation**

On the basis of the results, this chapter aims to provide the policy recommendations on how to enhance the entrepreneurship rate and the success rates of students with business background among the students of Gilgit-Baltistan region. These recommendations are aimed to provide suggestions from three angles which are government support, the enhancement of students' capability and the proper implementation of business education.

##### **6.1.1 Recommendations for the government**

###### **6.1.1.1 Reduce the start-up costs**

Creation of business incubators to encourage the university students towards entrepreneurial activities. Out of all the sample universities only one university, Karakorum International University Gilgit, has incubation center but it is at the transitional phase. Other universities should also establish business incubators. There are a series of issues while setting up incubators, for instance low hatching quality, small scale of these initiatives and so on. Therefore, government should focus more to enhance the overall efficiency of these programs by providing monetary relaxations and giving full support to establish a sound legal structure. Through these initiatives' government can attract large number of talented to increase the innovative ability of incubators. Furthermore, government should reduce the costs associated with entrepreneurial start-ups such as level of charges, types of charges and reducing the complications related to the procedures of start-up.



### **6.1.1.2 Improve service system for entrepreneurship**

The existence of quality entrepreneurship environment is possible when the allocation of the resources is based on the market system. To achieve this state government should not only encourage students to initiate entrepreneurial activities but also offer a favorable environment by improving the market system and encourage innovation. The goal of policy makers must be to protect the contractual rights, property rights and enhance the social security system. These goals can be attained if government enforces policies to create a favorable environment for enterprises and their operative activities.

### **6.1.1.3 Government's relationship with universities and enterprises**

Business without creation and innovation is not possible for entrepreneurs. Government should promote and encourage technological and innovative development and should also provide a channel to transfer innovation into industry. To do so, government must build a cooperation system with enterprises and universities to attain this goal. In this cooperation system, universities can play their role by providing innovative technology through their research programs. On the other hand, government can also provide indirect and direct monetary assistance to promote innovativeness. Through this initiative students will be able to start their businesses to commercialize innovative technology.

## **6.1.2 Recommendation for the educational institutes**

### **6.1.2.1 Importance of primary and secondary education**

Education and trainings play a key role in fostering entrepreneurship. Educators and trainers are focusing only on the entrepreneurship education in universities. The primary and secondary level education institutes should also focus on cultivating the youngsters.

Entrepreneurial skills and awareness should start from early education. Pakistan and Gilgit-Baltistan specifically lack early entrepreneurial education aspect to encourage creativity and innovativeness among the youngsters. Hence, educational institutes should progressively bring entrepreneurship education into their system, and should cover all the educational levels till graduation.

#### **6.1.2.2 Trainings and selection of teachers for entrepreneurship education**

Entrepreneurship not only requires traditional teaching methods but more emphasis should be on practical guidance. However, in Pakistan teachers lacks practicality in terms of entrepreneurial education, its operations and management. Thus, universities should encourage teachers to practical activities towards entrepreneurial activities. Other than that, universities should give more perks and privileges to teachers who have practical experience in entrepreneurial activities and have sound academic backgrounds. This step will help the students to experience the practical side of entrepreneurship besides from traditional education.

#### **6.1.2.3 Strong evaluation system for entrepreneurship education**

Although, the concept of entrepreneurship education was introduced very early in Pakistani universities in the form of various business-related degrees. But entrepreneurship education is yet to be introduced as an academic degree. Many countries, for instance China, have already introduced entrepreneurship education in universities. Pakistani universities don't have practical operational mechanisms and lacks evaluation system to look after business related degrees. Evaluation is the best judgement tool to check the inclination of university students. It also helps academicians to improve the entrepreneurship spirit and skills of the students.

#### **6.1.2.4 Practice teaching**

Universities in Pakistan should introduce innovation centers to foster applicability and practicality. Innovation centers are of great importance because they are responsible in establishing wide range of social networking where university, enterprise and community meet to form an entrepreneurship education ecosystem. It also integrates and develop various business resources in community. The establishment of entrepreneurial incubators are also important to promote entrepreneurial activities and research activities among the students.

### **6.1.3 Recommendations for students**

#### **6.1.3.1 Design the whole plan before starting any business**

Students should make executable and complete business plan prior to starting a business that must be applicable and based on operative market research. Plan should not be imaginary and subjective. Business plans are important because it gives entrepreneurs clarity in their ideas and helps in resolving the issues. It is also true that plans cannot be fully implanted as changes occurs but planning increases the success ratio.

#### **6.1.3.2 Budget planning**

Potential entrepreneurs should develop an effective and well-functioning budget plan. Entrepreneurs should also plan how to tackle increased in costs, sluggish sales etc.

#### **6.1.3.3 Cooperation with industries**

University students often face issues due to asymmetric business information due to lack of business experience and social experience. Business inclined students should take advantage from business associations and get access to these industry associations to gain influence and increase their status. They must understand the industry information, meet key role players

among the business community, meet industry partners. Potential entrepreneurs can also take guidance from business management consultants and learn various untapped resources while opening new ventures.

#### **6.1.3.4 Team work**

Due to funding constraints potential entrepreneurs cannot start their ventures at early stages. Entrepreneurs should build a team and divide the work on preference basis and assign appropriate tasks to each team member. Through this strategy they can form enterprise to a progressive stage.

#### **6.1.3.5 Bring competitiveness**

Our research also showed that the entrepreneurial success rate is minimal among young Pakistani graduates. This is due to lack of competitiveness. Most of the start-ups are without continuous innovation capability and technicalities. They simple adopt existing arenas and try to replicate dull business ideas. Students should enter into new venture with core competitiveness through innovative ideas for a long run development.

### **6.2 Research Limitations**

Every research work has more or less some limitations. This research work also has some limitations. To start with the empirical limitations, due to time constraint this research work consists of responses from only 255 respondents to run our tests. The actual university going students in Gilgit-Baltistan are in thousands. The sampling size for this research work is small compared with the total population size of university going students from Gilgit-Baltistan. This small size representation of the total population so this is the empirical limitation of this thesis work. Apart from empirical limitation, this research also has theoretical limitations as well. In

the literature review chapter, this research work has discussed various entrepreneurial benefits. I have included previous literature where the factors influencing the entrepreneurial inclination among potential entrepreneurs was discussed. There are too many factors involve in the inclination of students towards entrepreneurship such as cultural and social factors. However, to reduce complexity and to stick on the direction of this thesis work I have only focused on the six personal traits of a potential entrepreneurs. This has also caused some theoretical limitations in this thesis work.

### **6.3 Further Research**

Based on the limitations presented in this thesis, researchers can do further research by incorporating external culture environment and internal personality characteristics for the topic of university students from Gilgit-Baltistan region. Other than that, the purpose of this thesis was to find the role of entrepreneurial education and training on entrepreneurial characterizes of university students through quantitative research. Researchers can also focus on other factors such as why students from this region are not inclined towards start-ups.

## REFERENCES

- Adnyana, I. G. L. A., & Ni Made, P. (2016). Pengaruh Pendidikan Kewirausahaan, Self Efficacy dan Locus Of Control pada Niat Berwirausaha. *E-Jurnal Manajemen Universitas Udayana*, 5(2), 1160-1188
- Antonio, T. (2012). Inspiring Wednesday, Ciputra University Best Practice in Shaping Entrepreneurs in Higher Education. *Jurnal Entrepreneur dan Entrepreneurship*, 1(1), 21-27.
- Baig, S., Qasim, M., Xuemei, L., & Alam, K. M. (2020). Is the China-Pakistan economic corridor an opportunity or a threat for small and micro-entrepreneurs? Empirical evidence from Northern Pakistan. *Sustainability*, 12(5), 1727.
- Baumol, W. J., Litan, R. E., Schramm, C. J., & Strom, R. J. (2011). Innovative entrepreneurship and policy: toward initiation and preservation of growth. In *The Economics of Small Businesses* (pp. 3-23). Springer.
- Brockhaus Sr, R. H. (1980). Risk taking propensity of entrepreneurs. *Academy of management Journal*, 23(3), 509-520.
- Brush, C. G., Duhaime, I. M., Gartner, W. B., Stewart, A., Katz, J. A., Hitt, M. A., Alvarez, S. A., Meyer, G. D., & Venkataraman, S. (2003). Doctoral education in the field of entrepreneurship. *Journal of management*, 29(3), 309-331.
- Bryman, A., & Bell, E. (2015). *Business Research Methods*. Oxford University Press, USA.
- Budner, S. (1962). Tolerance for ambiguity scale. *Journal of Personality*, 30(1), 29-50.
- Bygrave, W., & HOFER, C. (1991). Theorizing about entrepreneurship Entrepreneurship Theory and Practice, winter.
- Chang, E. P., Kellermanns, F., & Chrisman, J. J. (2007). From intentions to venture creation: Planned entrepreneurial behavior among Hispanics in the US In T. Habbershon & M. Rice. *Entrepreneurship: The engine of growth*, 3, 119-146.
- Cloete, G. E., & Ballard, H. (2012). Factors influencing academic resilience of trainees in entrepreneurial development programmes: A case from Saldanha Bay Municipal Area in South Africa. *International Journal of Technology Management & Sustainable Development*, 10(3), 217-230.

- Cromie, S. (2000). Assessing entrepreneurial inclinations: Some approaches and empirical evidence. *European Journal of Work and Organizational Psychology*, 9(1), 7-30. <https://doi.org/10.1080/135943200398030>
- Engle, D. E., Mah, J. J., & Sadri, G. (1997). An empirical comparison of entrepreneurs and employees: Implications for innovation. *Creativity Research Journal*, 10(1), 45-49.
- Entrialgo, M., Fernández, E., & Vázquez, C. J. (2000). Characteristics of managers as determinants of entrepreneurial orientation: some Spanish evidence. *Enterprise and innovation management studies*, 1(2), 187-205.
- Erdem, F. (2001). A cultural approach toward risk taking propensity and tolerance for ambiguity of entrepreneurs. *Akdeniz IIBF Dergisi*, 2, 43-61.
- Farsi, J. Y., Zarei, B., & Lashgari, M. (2013). Critical success factors in exploitation of entrepreneurial opportunities in software development industry. *Asian Journal of Research in Business Economics and Management*, 3(7), 1-22.
- Fuller, B., Liu, Y., Bajaba, S., Marler, L. E., & Pratt, J. (2018). Examining how the personality, self-efficacy, and anticipatory cognitions of potential entrepreneurs shape their entrepreneurial intentions. *Personality and Individual Differences*, 125, 120-125.
- Gal, P., Nicoletti, G., von Rüden, C., OECD, S. S., & Renault, T. (2019). Digitalization and Productivity: In Search of the Holy Grail-Firm-level Empirical Evidence from European Countries. *International Productivity Monitor*(37), 39-71.
- Garavan, T. N., & O'Cinneide, B. (1994). Entrepreneurship Education and Training Programmes: A Review and Evaluation--Part 1. *Journal of European Industrial Training*, 18(8), 3-12.
- Gilad, B. (1982). *An interdisciplinary approach to entrepreneurship: locus of control and alertness*. New York University.
- Green, R., David, J., Dent, M., & Tyshkovsky, A. (1996). The Russian entrepreneur: A study of psychological characteristics. *International Journal of Entrepreneurial Behaviour & Research*, 2(1), 49-58.
- Haase, H., & Lautenschläger, A. (2011). The 'teachability dilemma' of entrepreneurship. *International entrepreneurship and management journal*, 7(2), 145-162.
- Hannu, L. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality. *International Journal of Entrepreneurial Behaviour & Research*, 6(6), 295-310.

- Hansemark, O. C. (1998). The effects of an entrepreneurship programme on need for achievement and locus of control of reinforcement. *International Journal of Entrepreneurial Behavior & Research*.
- Henry, C., Hill, F., & Leitch, C. (2005). Entrepreneurship education and training-can entrepreneurship be taught? Part I. *Education and Training*, 47(2), 98-111.
- Herrington, M., & Kew, P. (2016). 2017 Global Entrepreneurship Monitor. *London: Global Entrepreneurship Research Association (GERA)*. Retrieved May, 19, 2017.
- Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial marketing management*, 33(5), 429-438.
- Ibidunni, A. S., Kolawole, A. I., Olokundun, M. A., & Ogbari, M. E. (2020). Knowledge transfer and innovation performance of small and medium enterprises (SMEs): An informal economy analysis. *Heliyon*, 6(8), e04740.
- Ibrahim, A. B., & Soufani, K. (2002). Entrepreneurship education and training in Canada: a critical assessment. *Education+ training*.
- Jackson, D. N. (1994). *Jackson personality inventory-revised*. Sigma Assessment Systems, Research Psychologists Press Division.
- Jeffrey, W. A. (2002). On becoming an entrepreneur: an evolving typology. *International Journal of Entrepreneurial Behaviour & Research*, 8(4), 222-234.
- Karabulut, A. T. (2016). Personality traits on entrepreneurial intention. *Procedia-Social and Behavioral Sciences*, 229, 12-21.
- Karlan, D., & Valdivia, M. (2011). Teaching entrepreneurship: Impact of business training on microfinance clients and institutions. *Review of Economics and statistics*, 93(2), 510-527.
- Kautonen, T., Van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship theory and practice*, 39(3), 655-674.
- Khan, A. A., Baig, S. M., & Muhammad, F. (2020). China-Pakistan Economic Corridor, ICTs, and Digital Economy: A Cross-District Analysis of Baseline Data for Gilgit-Baltistan. *Global Regional Review*, 1, 207-221.
- Kirton, M. J. (1981). A reanalysis of two scales of tolerance of ambiguity. *Journal of personality assessment*, 45(4), 407-414.



- Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. *Journal of managerial Psychology*.
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship theory and practice*, 29(5), 577-597.
- Leone, C., & Burns, J. (2000). The measurement of locus of control: assessing more than meets the eye? *The Journal of psychology*, 134(1), 63-76.
- Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of personality assessment*, 38(4), 377-383.
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of business venturing*, 28(2), 211-224.
- McClelland, D. C., & Mac Clelland, D. C. (1961). *Achieving society* (Vol. 92051). Simon and Schuster.
- Mueller, S. L., & Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of business venturing*, 16(1), 51-75.
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277-299.
- Neck, H. M., & Corbett, A. C. (2018). The scholarship of teaching and learning entrepreneurship. *Entrepreneurship Education and Pedagogy*, 1(1), 8-41.
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International small business journal*, 25(5), 479-510.
- Premand, P., Brodmann, S., Almeida, R., Grun, R., & Barouni, M. (2012). Entrepreneurship training and self-employment among university graduates: Evidence from a randomized trial in Tunisia. *World Bank Policy Research Working Paper*(6285).
- Riaz, A., Khan, S., Muhammad, S., Liu, C., Shah, M. T., & Tariq, M. (2018). Mercury contamination in selected foodstuffs and potential health risk assessment along the artisanal gold mining, Gilgit-Baltistan, Pakistan. *Environmental geochemistry and health*, 40(2), 625-635.
- Riipinen, M. (1994). Extrinsic occupational needs and the relationship between need for achievement and locus of control. *The Journal of psychology*, 128(5), 577-587.

- Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship theory and practice*, 15(4), 13-32.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological monographs: General and applied*, 80(1), 1.
- Ryan, J. C., Tipu, S. A., & Zeffane, R. M. (2011). Need for achievement and entrepreneurial potential: a study of young adults in the UAE. *Education, Business and Society: Contemporary Middle Eastern Issues*, 4(3), 153-166.
- Sagie, A., & Elizur, D. (1999). Achievement motive and entrepreneurial orientation: a structural analysis. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 20(3), 375-387.
- Saleem, S. (2011). Examining success factors: Entrepreneurial approaches in mountainous regions of Pakistan. *framework*, 3(4).
- Shahab, Y., Chengang, Y., Arbizu, A. D., & Haider, M. J. (2019). Entrepreneurial self-efficacy and intention: do entrepreneurial creativity and education matter? *International Journal of Entrepreneurial Behaviour and Research*, 25(2), 259-280.
- Stewart Jr, W. H., Carland, J. C., Carland, J. W., Watson, W. E., & Sweo, R. (2003). Entrepreneurial dispositions and goal orientations: A comparative exploration of United States and Russian entrepreneurs. *Journal of small business management*, 41(1), 27-46.
- Stewart Jr, W. H., Watson, W. E., Carland, J. C., & Carland, J. W. (1999). A proclivity for entrepreneurship: A comparison of entrepreneurs, small business owners, and corporate managers. *Journal of business venturing*, 14(2), 189-214.
- Teoh, H. Y., & Foo, S. L. (1997). Moderating effects of tolerance for ambiguity and risktaking propensity on the role conflict-perceived performance relationship: Evidence from Singaporean entrepreneurs. *Journal of business venturing*, 12(1), 67-81.
- Thomas, A. S., & Mueller, S. L. (1998). Are entrepreneurs the same across cultures. Trabajo presentado en el XII Annual National Conference for Small Business and Entrepreneurship,
- Thomas, A. S., & Mueller, S. L. (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of international business studies*, 31(2), 287-301.
- Timmons, J. A., Spinelli, S., & Tan, Y. (2004). *New venture creation: Entrepreneurship for the 21st century* (Vol. 6). McGraw-Hill/Irwin New York.

- Utsch, A., & Rauch, A. (2000). Innovativeness and initiative as mediators between achievement orientation and venture performance. *European Journal of Work and Organizational Psychology*, 9(1), 45-62.
- Valerio, A., Parton, B., & Robb, A. (2014). Entrepreneurship education and training programs around the world: Dimensions for success.
- Van Praag, C. M., & Versloot, P. H. (2007). What is the value of entrepreneurship? A review of recent research. *Small business economics*, 29(4), 351-382.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship theory and practice*, 31(3), 387-406.
- Zacharakis, A. L. (1997). Entrepreneurial entry into foreign markets: A transaction cost perspective. *Entrepreneurship theory and practice*, 21(3), 23-40.

## Appendix A

### Questionnaire Questions

#### 1. Respondent Identity

Please fill the related information

- i. Are you a Business Student? YES \_\_\_\_ NO \_\_\_\_
- ii. Gender \_\_\_\_\_
- iii. Age \_\_\_\_\_
- iv. Educational Status? Graduated \_\_\_\_ Studying \_\_\_\_\_
- v. Any family member who is an entrepreneur? YES \_\_\_\_ NO \_\_\_\_
- vi. Family Income? 10000-30000\_\_\_\_, 31000-60000\_\_\_\_, 61000-90000\_\_\_\_, 91000-120000\_\_\_\_, 121000- 150000\_\_\_\_, 151000-180000\_\_\_\_, More than 180000\_\_\_\_\_

#### 2. Construct Name with Items:

Please Note: the following questions have answers from the scale of five. Please tick mark (√) from the scale of 5, the most appropriately matching scale with you.

No.		Score				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	<b>Risk taking propensity</b>					
1.1	I am willing to take higher risks for higher returns					
1.2	I do not care if the profit is small for a long time provided it is assured and constant					
1.3	I never fear moving into a new undertaking, I know nothing about					
1.4	I prefer to avoid any risk situation at all					

	costs					
1.5	I prefer a business that offers high returns with high risks over a secured job with steady salary					
2.	<b><u>Innovativeness</u></b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
2.1	I often surprise people with my novel ideas					
2.2	I prefer the work that requires original thinking					
2.3	I like the job which demands skill and practice rather than innovativeness					
2.4	I obtain more satisfaction from mastering a skill than coming up with a new idea					
2.5	I like to experiment with various ways of doing the same thing					
2.6	I usually continue doing a job in exactly the way it was taught to me					
2.7	Nothing gets accomplished in this world unless you stick to some basic rules					

2.8	Sometimes I rather enjoy going against the rules and doing things I'm not supposed to do					
3	<b><u>Locus of control</u></b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
3.1	My life is determined by my own actions					
3.2	I feel in control of my life					
3.3	I feel that what happens in my life is mostly determined by people in powerful positions					
3.4	To a great extent my life is controlled by accidental happenings					
3.5	When I get what I want, it is usually because I worked hard for it					
3.6	When I get what I want, it is usually because I am lucky					
3.7	My success depends on whether I am lucky enough to be in the right place at the right time					
3.8	Whether or not I am successful in life depends mostly on my ability					

4	<b><u>Need for achievement</u></b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
4.1	Achievement is more important than material or financial reward					
4.2	Achieving the aim or task gives greater personal satisfaction than receiving praise or recognition					
4.3	Financial reward is regarded as a measurement of success					
4.4	Achievement-motivated people constantly seek improvements and ways of doing things better					
4.5	Achieving the aim and task brings more financial reward than praise or recognition					
4.6	Achieving the aim and task is regarded as a measurement of success					
5	<b><u>Tolerance of ambiguity</u></b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>

5.1	I like to fool around with new ideas, even if they turn out later to be a total waste of time					
5.2	Practically every problem has a solution					
5.3	A problem has little attraction for me if I don't think it has a solution					
5.4	I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer					
5.5	I have the adaptability to every unpleasant social situation					
5.6	I get pretty anxious when I'm in a social situation over which I have no control					
6	<b>General self-efficacy (Six items)</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
6.1	I will achieve all the goals I have set for myself					
6.2	I am always certain that I will achieve all the difficult tasks I will face					



6.3	I feel confident that I will perform all the different tasks effectively					
6.4	Even if the tasks are difficult to do, I will still perform them effectively					