

**ASSESSING THE IMPACT OF ENTREPRENEURSHIP
EDUCATION AND PERSONAL TRAITS ON ADOPTION OF
ENTREPRENEURIAL CAREER: A STUDY OF INCUBATORS OF
ISLAMABAD**



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Enrollment No: 01-246171-008

Supervisor: Dr Abdul Baseer Qazi

A thesis submitted to the Department of Software Engineering, Faculty of Engineering Sciences, Bahria University, Islamabad in the partial fulfillment for the requirements of a Masters degree in Engineering Management

July 2020

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ABSTRACT

This research is mainly concerned with the significance of entrepreneurship education in the life of entrepreneurs. Entrepreneurship has gained a significant place in the recent debate and discourse on education. Previously it was promoted to ensure economic development but the recent shift in technological advancement, globalization and the emergence of complex relationships has led to recognition of its ultimate importance in education. With recent growth and development in the curriculum and courses of study devoted to entrepreneurship, there has been a huge devotion both in the United States and Europe towards the education of entrepreneurship. Today entrepreneurship education has been recognized by many universities throughout the world. For this purpose, a survey based empirical investigation is conducted to study the relationship of entrepreneurial education and personal traits including need for achievement, risk-taking and self-confidence with entrepreneurial capacity along with mediation of entrepreneurial attitude. A sample was collected from 150 entrepreneurs with the help of business incubation centers in Islamabad. Data was analyzed with SEM (Structural Equation Modeling) using Smart PLS software. According to the results, the entrepreneurial education, need for achievement, risk-taking and self-confidence are positively related with the entrepreneurial capacity and entrepreneurial attitude mediates this relationship. However, the strongest impact on the entrepreneurial capacity was of the self-confidence of entrepreneurs.

Keywords: Entrepreneurship education, Entrepreneurial capacity, Entrepreneurial attitude, Need for achievement, Self-confidence, Risk-taking

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CHAPTER 1

INTRODUCTION

1.1 Introduction of Study

Incubation centers provide services such as office space and management training to startups and individuals with new business ideas to develop their business. For national and regional economic development, incubation centers act as catalysts. Incubation centers in general give services such as planning, launch, management of operations and growth of businesses. They provide new practices and methodologies which help businesses to grow successfully (Dahalan, Jaafar, & Rosdi, 2015). Entrepreneurial capacities are enhanced by incubation centers as they provide help in promotion of small-scale enterprises and business ideas. Entrepreneurial capacities are nurtured by incubation centers to help in innovative business ideas. Creation of entrepreneurs is the vital role played by incubation centers as entrepreneurs are important for society's economic growth. Incubation centers bring together human power, funds, market potentials and generate new ideas. Entrepreneurial attitude is developed among self-motivated and young individuals by incubation centers to promote new businesses (Ramar, Prabakaran, Rajendran, & MuthuKumaran, 2020). Incubation centers help to develop entrepreneurial capacities and entrepreneurial attitudes. Entrepreneurial capacity is the ability of an individual to evaluate economic potential of business ideas and to convert them into reality (Mukherjee & Giest, 2019). Entrepreneurial attitude can be defined as set of predetermined feelings, thoughts and behavioral intentions which change according to the situation (Brandt, 2019). Entrepreneurial capacity is enhanced by training, innovation and incorporating business ethics provided by incubation centers. For better development of entrepreneurship, training is required to reinforce competences. Entrepreneurship capacity can be increased by combination of innovation and training (Rodríguez-López & Souto, 2020). Entrepreneurial attitude is developed by entrepreneurial education. Promotion of entrepreneurial behavior is boosted by special education and courses developed for entrepreneurship. Entrepreneurial education enables individuals to develop

skills required to manage new business ventures. Exposure of entrepreneurial training and education is particularly effective in development and promotion of entrepreneurial capacities. Entrepreneurial training boosts intention to start new business venture (Malmström, Voitkane, Johansson, & Wincent, 2020). Entrepreneurial attitude is developed by entrepreneurial education and now it is mandatory in many business programs and courses. Attitude determines actions to start new business ventures and to shape personality traits. Entrepreneurial attitude is associated with intentions to shape behaviors relevant to business ideas. For creation of new business ventures attitude is first developed and then actions are taken based on intention and behavior. Entrepreneurial attitude can be varied by environment characters in which startups or new ventures are initiated (Fernandez, Santos, & Jiménez, 2019). Risk taking attitude is one of important factors associated with entrepreneurial capacity development. Risk taking attitude defines a person's willingness to bear losses to get more profits. It is associated with endorsement of unpredictability and possible downside variability of performance of new venture and business ideas. Risk taking propensity develops high chances of success of a business startup as well as show willingness of investors in the entrepreneurial business ventures. For achievement of success in entrepreneurship risk taking behaviors are important to attitude (Majumdar & Varadarajan, 2013). Incubation centers motivate risk taking attitude as it smooths the path for business development (Ramar et al., 2020). One of the key entrepreneurial skills associated with development of capacity is self-confidence. Lack of self-confidence destructs business plan as it develops demoralization to initiate new business idea. Self-confidence is associated with how a person feels about his ability and chances of success of a business plan. Successful entrepreneurs are not scared of taking risks. Self-confidence in a person to implement business plan is more of situational trait rather than personal trait. A person having more self confidence in one situation can lose it in another situation (Gielnik, Bledow, & Stark, 2020). Self-confidence provides basis to self-control to initiate and implement new business plan. Self-confidence accelerates chances of success as it enhances opportunities of a person to go after a plan, provides better persistence, develops easier chances to overcome obstacles and creates greater acceptance of ideas and chances for individuals (López-Meri, Alonso-Muñoz, & Casero-Ripollés, 2020). Among entrepreneurial attitude, need for achievement is also an

important factor that is associated with development of persistent in behavior of entrepreneurs. Persistence is very important component in determination of success of business plan as it is relevant to interaction of business goals and need for achievement. Business goals and need for achievement are much relevant to secure desired results of business plan. (Naidu, Rambabu, & Ravikanth, 2020).

The entrepreneurial capacity and attitude of potential entrepreneurs in Pakistan has so been far reported from Pakistan. The virtual non-existence of data has been the most important hurdle in the way of this research. Therefore, this study investigates the role of personality traits and entrepreneurial education to develop entrepreneurial attitude and capacity. In the context of Pakistan, this study will explain how the entrepreneurial education and personality traits affect the entrepreneurial capacity in presence of entrepreneurial attitude as mediator. Because in the developing country like Pakistan where the education sector is neglected and also the entrepreneurship is not encouraged among youth, this study will help to examine the factors that can help the entrepreneurial sector to gain a boost. For developing the culture of entrepreneurship in Pakistan, there are certain factors that must be kept in mind and this study will examine the entrepreneurial education and personality traits. This study will present an analysis of the state of entrepreneurship prevailing in Pakistan and the reforms that are needed for development of entrepreneurship especially in the context of entrepreneurial education.

1.2 Problem Identification

This research is associated with entrepreneurial development in Pakistan, for that business incubation centers are considered for research analysis. Entrepreneurial development is analyzed on the basis of attitude and capacity of entrepreneurs. Capacity is one of important variables for the determination of success relevant to a new business idea or startup venture. Incubation centers play an important role in capacity building of entrepreneurs which is core consideration in this research. Entrepreneurial attitude is linked with development of entrepreneurial capacity to a successful business venture (Chen, Hsiao, Chang & Chou, 2017). In this research four important variables are analyzed as determinants of capacity and attitude relevant to entrepreneurship. These four variables include entrepreneurial education, risk taking attitude, need for achievement

and self-confidence. The purpose of this study is to analyze whether impact of these variables is significant to the successful development and growth of business ideas. Entrepreneurial education is one of important components with entirely different scope to address the needs of individuals to the development of business plan. Entrepreneurial education provides sufficient tools to develop capacity and to create successful entrepreneurial ideas. Personality traits another important factor associated with development of capacity are required for entrepreneurship. These personality traits include risk taking behavior of individual, need for achievement and self-confidence. Impact of these personality traits is analyzed on entrepreneurial attitudes as well as entrepreneurial capacities. Risk taking attitude is analyzed to the extent to which a person is willing to bear losses in case business plan fails. Need for achievement is associated with development of urge in an individual to achieve specific goals, it keeps a person going. Self-confidence is also one of important personality traits relevant to the success of business venture.

1.3 Research Questions

What is impact of entrepreneurial education on entrepreneurial capacity with mediating role of entrepreneurial attitude?

What is impact of risk-taking attitude on entrepreneurial capacity with mediating role of entrepreneurial attitude?

What is impact of need for achievement on entrepreneurial capacity with mediating role of entrepreneurial attitude?

What is impact of self-confidence on entrepreneurial capacity with mediating role of entrepreneurial attitude?

1.4 Research Objectives

Main objectives of study are

- To study entrepreneurial education, its importance, how it shapes entrepreneurial behavior and what role personality traits must play.
- To study and analyze the role of entrepreneurial education and its impact on entrepreneurial attitude and capacity of entrepreneurs.

- To study and analyze the role of human personality traits and its impact on entrepreneurial attitude and capacity of entrepreneurs.

1.5 Significance of Study

Entrepreneurship is important with development of business relevant skills in individuals. It helps in development of business plans relevant to create new business ventures and startups. Development of these skills allow tapping into unrealized talents for which entrepreneurial capacity building is required. This study is relevant in development of ideas associated with entrepreneurial attitude and entrepreneurial capacity which are important to new business ventures. This study is significant for the development of new business incubation centers as well as for the improvement of already existing ones. Development of incubation centers and importance of entrepreneurial educational is discussed in this study. This study addresses how personal traits benefit the entrepreneurs in their startups. These traits are essential for the success of business startups. Risk taking attitude, need for achievement and self-confidence are associated with development of relevant skills to run business. These skills are not specific and enhance the general creativity that is essential for the development of ideal entrepreneur character. Personal traits play role of nourishment to business ideas and provide growth and development in all phases. It highlights perspectives to develop confidence and stimulation of economic and financial factors associated with business plans. Success of business depends on critical thinking that allows developing capacity and improving attitude towards the development of business plan. Foundation of the smart decision making can be led by entrepreneurial education and development of personality traits, to have impact on business ideas and application of those ideas. This study can lead to develop smart incubation centers and well-equipped entrepreneurs those who will be able to get personal gains. It can help to develop innovation and creativity in the system which enables system to function smoothly and perform greatly. Incremental wealth in society is created through entrepreneurship and it also leads to welfare of that society, and it can be enhanced. This study covers aspects associated with development of entrepreneurial education and advancement.

CHAPTER 2

LITERATURE REVIEW

2.1 Entrepreneurship

Entrepreneurship refers to the processes of planning, designing and then launching and successfully running new business of any size. The people who initiate these processes are known as entrepreneurs (Westhead, Ucbasaran, & Wright, 2009). A definition that fits this term in wider context is often used in field of economics where entrepreneurship is the ability to identify the opportunities and then act upon them to translate resources and technologies into businesses (Katila, Chen, & Piezunka, 2012). An entrepreneur can recognize the commercial potential of available resources and organizing the talent and capital that can turn a technology, a resource and an invention into commercially worthwhile innovation. In this way, the terminology of "Entrepreneurship" also encompasses innovative activities that happen in established organizations and new businesses as well (Farrukh, Lee, Sajid, & Waheed, 2019). Entrepreneurship is associated with value creation which makes it an important influential element for the economic development of a country. Entrepreneurship gives way to constant business renewal in an economy and thus boosts the employment ratio of a country as well (Zampetakis et al., 2009). Getting an insight on the concept of entrepreneurship, the next thing to know is that creation of a new venture is not a piece of cake for everyone. The observation is made that very few individuals have the distinctive traits that bond them with the idea and intention of entrepreneurship (Chamola & Jain, 2017).

2.2 Entrepreneurial Education in Pakistan

Research analysis with entrepreneurial education in Pakistan showed that several higher education institutions are providing specialized degrees in entrepreneurial expertise as well as courses related to entrepreneurial experience are also included in several degrees as mandatory part. Entrepreneurial education in Pakistan is associated with development of introduction of subjective norms and development of attitude essentially required for organizing a successful business entity. In Pakistan entrepreneurial education is

motivating innovation and socio-economic effectiveness (Hussain & Norashidah, 2015). Aslam, Awan & Khan (2012) conducted a study to analyze the entrepreneurial education and entrepreneurial intention to analyze its impact in Pakistan for which they gathered data from Punjab. Their research results showed that entrepreneurial education is important to develop intentions towards the promotion of entrepreneurship. In Pakistan entrepreneurial education is promoted by keeping in view that it would promote socio economic growth in the region. Entrepreneurship is promoted in Pakistan by young individuals promoting them by designing essential university courses (Aslam, Awan & Khan, 2012). Tanveer and fellows in their research study gathered data from business graduates and undergraduate students in Pakistan to analyzed entrepreneurial education in Pakistan and its impact. Their study showed that university student after acquiring education in entrepreneurship are confident enough that they are more interested in developing independent business rather than initiating business to introduce new business in already existing setup. Professional knowledge and entrepreneurial skills of students are enhanced by higher level degree in entrepreneurial education (Tanveer *et al.*, 2013). Entrepreneurial education serves as an effective tool to enhance and enrich the capabilities of students required for managerial as well as growth purpose of business units. Data from Pakistan also showed that due to uncertainty of capital market and facilitation system identification of opportunities is difficult for students in Pakistan. Limited understanding of society and lack of loaning facilities hinders the entrepreneurial experiences of students in Pakistan (Ahmed, Chandran & Klobas, 2017).

2.3 Importance of Entrepreneurship Education in Engineering

Entrepreneurial education is essential component in every field where entrepreneurial intention exists. In current time of highly competitive markets innovation in product can successfully be conveyed to consumers through highly developed entrepreneurial skills which is done through entrepreneurial education. Entrepreneurial education has significant impact on social norms, attitudes, self-efficacy behavior and entrepreneurial intention associated with development of business plans. Entrepreneurial education bridges the gap between production of product associated with engineering and its promotion in market (Sun, Lo, Liang & Wong, 2017). Unemployment rates are high

globally due to the disparities in capital and labor markets. This situation demands multidisciplinary engineers which have additional skills required for the effective development of business programs. Equipment of engineers with greater entrepreneurial skills have become an essential requirement due to the increased challenges and market requirements of engineering education. To bridge the differences emerged due to the unique market requirement for engineers' entrepreneurship is being integrated in engineering degree. It helps boost the personality traits requires for market functioning (Kim & Park, 2019). Entrepreneurial education plays a significant role in development of engineers' entrepreneurship by motivating them and to develop intentions associated with entrepreneurship among future engineers. Entrepreneurial intentions nourished by entrepreneurial education develop need for independence among engineers it requires to survive in highly competitive market. Entrepreneurial education is aimed at development of effectiveness of action among engineers (Barba-Sánchez & Atienza-Sahuquillo, 2018). Entrepreneurial education develops transversal skills among students that are becoming increasingly essential for students, so it is required for students of all disciplines. To engineering students, entrepreneurial education enables them to recognize opportunity, commercialize the new concepts initiate new business ventures and effectively manage resources. To avoid economic stagnation in current dynamic economies it is essential that entrepreneurial skills are developed among all individuals (Greco & Denes, 2017).

2.4 Entrepreneurial Attitude

Personal attitude of a person indicates that person's attitude towards main behavior that reflects his or her expectations regarding the wanted and unwanted consequences that results from that main behavior. In entrepreneurial context, the main behavior is that of entrepreneurship. A person can be significantly influenced and encouraged to pursue a goal by altering his or her thinking and mind-set which makes an overall attitude (Mueller & Thomas, 2001). Uddin and Bose (2012) state that personal attitude depends on the outline of an individual's beliefs and evaluations that are associated with those beliefs. In other words, an individual's behavior depends on his or her attitudes and beliefs and these attitudes and beliefs have a crucial part in shaping that person's actions. Ajzen (1991) in his theory of planned behavior stated that personal attitude of a person is

the extent to which a person assesses his or her main behavior in negative or positive way. He also stated that personal attitude that an individual has is his or her personal pull towards the target behavior. In the studies related to entrepreneurial intentions, personal attitude towards behavior is seen as a significant factor that influence the intention of a person in a very positive way (Usman, 2019; Zampetakis et al., 2009).

2.5 Entrepreneurial Capacity

In entrepreneurial study “opportunity recognition capacity” is called entrepreneurial capacity. Entrepreneurial capacity is a fundamental variable that explains the engagement of individual in entrepreneurial ventures (Clarysse, Tartari, & Salter, 2011). Entrepreneurial capacity which is basically the capacity of “opportunity recognition” happens when a person identifies of a chance to make a combination of resources in most suitable way that can generate profit (Shane, 2003). Baron and Ensley (2006) concluded in their study that the skills of opportunity identification enhance the probability of an individual becoming an entrepreneur. It happens because it is essential for an individual to have the capacity of identifying opportunities before getting engaged in entrepreneurial activities and efforts.

2.6 Relationship of Entrepreneurial Education and Entrepreneurial Attitude

Entrepreneurial education and training are comprised of the courses that enhance the knowledge of students in terms of entrepreneurial traits, attitude, behavior and capacity (Fayolle & Gailly, 2015). Kuratko (2016) stated in his study that entrepreneurship is something that can be better learned through education and training. The abilities, traits and skills that are required for an individual to become entrepreneur can be acquired by proper training. Lin et al., (2019) stated that entrepreneurship attitude is effectively learned and developed from ‘learning by doing’ and from relevant entrepreneurship courses. Szerb and Imreh (2007) revealed the importance of entrepreneurial courses in developing entrepreneurial attitude in students. The study further elaborated that although, not every university has the ability to offer independent entrepreneurial courses, but at least Economics students in universities can acquire entrepreneurial education within scope courses like Business economics so their entrepreneurial attitude

can be fed. Entrepreneurial education when has the object to develop and improve the entrepreneurship quality, drive, ambition and pioneering along with the adventurous spirit of students to prepare for enterprise and business plan then it is basically building entrepreneurial attitude in a young individual (Liu, Lin, Zhao, & Zhao, 2019). Li et al. (2020) argued in their study that entrepreneurial training and education affect individuals' attitudes and behavioral intentions in terms of entrepreneurship.

While conducting a study on Hungarian universities and doing comparative analysis of Hungarian universities and universities of other countries to evaluate how the students of the universities plan their future on the bases of education they receive, the study identified that entrepreneurship courses is very important as students taking these courses strongly develop an attitude to prefer entrepreneurship position. Through method of MLR regression, the study further proved that entrepreneurship education with relevant courses positively affect students' attitude to opt for entrepreneurial carrier (Szerb & Imreh, 2007). In a nutshell, it can be said that the purpose of entrepreneurial training and education is to assist individuals in developing their entrepreneurial capabilities, which is combination of entrepreneurial knowledge, abilities and attitude (Liu et al., 2019).

2.7 Relationship of Human Personality Traits and Entrepreneurial Attitude

Personality traits are the attributes of a person that leads him or her to a certain attitude or behavior. In entrepreneurial context, these traits also develop the strategic abilities and resources that are required by an entrepreneur and help that individual to discover and identify the entrepreneurial opportunities (Karabulut, 2016). The personality traits that are associated with entrepreneurial attitude and intentions are openness to new ideas and experiences, agreeableness, Conscientiousness, Extraversion, and less Neuroticism means emotional stability. These 5 personality traits are commonly known as Big 5 personality traits. These traits in their each capacity strengthen the passion of an individual to become an entrepreneur which is that person's attitude towards entrepreneurship (Kerr, Kerr, & Xu, 2018). Zhao, Seibert, and Lumpkin (2010) stated in a study that according to the theory of career choice, a person pursues his or her career depending on the personality traits in that individual. Personality traits, particularly those in the framework

of Big 5 have robust effect on people who have a particular entrepreneurial attitude in them, and they mainly become self-employed persons or entrepreneurs (Chamola & Jain, 2017).

The entrepreneurial attitude builds in a person who is not fond of routine and takes responsibility till they achieve a concrete result of their decisions and this requires intent focus and such focus is a crucial characteristic of conscientious trait (Antoncic, Bratkovic Kregar, Singh, & DeNoble, 2015). Likewise, extravert person knows the art of talking in people and is comfortable to make relationship ships and engage socially and therefore is a likeable to make new business relationships more efficiently which is another entrepreneurial attitude of a person (Majumdar & Varadarajan, 2013). The agreeableness is a personality dimension of Big 5 that indicates towards a person's propensity to defer to other people. An individual who have low level of agreeableness is antagonistic and cold. While People with high agreeableness are more cooperative, trusting and warm which help them in making strong relationships in life and business both (Roomi & Harrison, 2008). The openness personality trait refers to the openness that a person has for experience dimension. The trait addresses the range of interests in an individual and his or her fascination with the phenomena of novelty which helps in the development of innovative entrepreneurial attitude in a person (Ariani, 2013).

2.8 Relationship of Risk-Taking Attitude and Entrepreneurial Attitude

Risk taking propensity in an individual is his or her tendency and inclination towards taking risk. In entrepreneurial context, risk taking propensity is the inclination or capability of individuals to take risks in their business or entrepreneurship activities. In order to develop positive attitude in an individual towards starting an enterprise, it is essential that he or she is willing to take risk in making entrepreneurial decisions and running entrepreneurial activities (Asmara, Djatmika, & Indrawati, 2016). Zhao et al. (2010) say in a study that people with propensity of taking risks rather opt for a career in entrepreneurship because it has a positive attitude in expanding and running a business. Another study by Wijaya and Budiman (2013) reflects that individual who are inclined to take risks of starting business take entrepreneurship as a challenge that they want to adapt and not as a challenge that can cause havoc in their life. This is a sign of strong

entrepreneurial attitude in a person. Plax and Rosenfeld (1976) found that people who are willing to take risks have certain characteristics in them such as persistence, effective communication, confidence, extraversion, cleverness, innovativeness, sharpness, opportunistic and manipulative and all these characteristics overlap with the attributes of strong entrepreneurial attitude in a person. Stewart Jr and Roth (2001) conducted a meta-analyzes research on risk taking propensities in entrepreneurs to compare that which of the two, entrepreneur or managers have higher levels of tendencies of taking risk. The result showed that entrepreneurs demonstrate higher level of risk taking than managers, which proved that risk taking propensity in an entrepreneur differentiates them from prototypical managers and thus this trait in people is necessary for a strong and positive entrepreneurial attitude in them.

2.9 Relationship of Need for Achievement and Entrepreneurial Attitude

Achievement in business world refers to the solid results that are associated with startup and development of a new business venture and a determination in a person to acquire those results are his need of achievement. A person with high level of need for achievement performs a lot better with new and challenging tasks that are not just the part of routine. Moreover, that person takes responsibility of his or her performance level. In turn, that person seeks valuable feedbacks, compare him or herself with others and set goals that are challenging enough to improve the performance (Mahfud, Triyono, Sudira, Mulyani, & Economics, 2020). Need for achievement is a motivation in individuals which push them to always move forward and be better and have realistic goals for their business development (Asmara et al., 2016). Kusumawijaya (2019) stated in his study that Need for achievement in context of entrepreneurship is when entrepreneur tries to achieve intense progress and high level of achievement in his or her business development.

The Need for achievement in a person greatly strengthens his or her entrepreneurial attitude because individuals with high need for achievement does not get satisfied of their performance easily and their want for higher achievement push them to continuously strive so they can gain results which makes them perfect candidate for entrepreneurship and considering this they become more intent on starting their business venture (Farrukh

et al., 2019). Need for achievement works as a force in person which drives fundamental psychological process in an individual that urge him or her to always prioritize the worth of achievement behavior (Mahfud et al., 2020). Need for achievement in an individual drive him or her to take initiative and act to achieve ultimate success so a competitive advantage can be made for business (Bux, Honglin, & Business, 2015). Goldberg and Rosolack (1994) concluded in a study that entrepreneurs possess higher need for achievement as compared to other professionals which make entrepreneurs different from others in achievement behavior and therefore this trait is a strong predictor of entrepreneurial attitude and intention. In order to become entrepreneurs, a person should have the propensity to always strive in order to achieve a progress in business establishment and then continue to come up with new ways that can lead to superior performance as this encourages individuals to start a business as entrepreneurs (Karabulut, 2016). A wide range of studies (Asmara et al., 2016; Díaz-Casero, Hernández-Mogollón, & Roldán, 2012; Farrukh et al., 2019) have concluded that individuals with higher need for achievement have stronger passion to become entrepreneur than those who have less need to achieve.

2.10 Relationship of Self-Confidence and Entrepreneurial Attitude

Self-confidence also known as self-esteem refers to the personal attitude or trait that indicates the degree of self-confidence or likeness a person has for himself (Abbassi & Sta, 2019). Self-confidence can be a result of self-evaluation that a person conducts, and the outcome is a personal value that affects his or her emotions and moods (Brunel, Laviolette, & Radu-Lefebvre, 2017). Goldberg and Rosolack (1994) emphasized on the point that high level self-confidence brings emotional stability while low level self-confidence leads to anxiety and stress and therefore people low on scale of self-confidence get easily influenced by social pressures (Brunel et al., 2017). The people with low self-esteem are uncertain to adopt appropriate behaviors in particular situations. In tricky situations, they rather look up to a role model and make choices on their decisions to overcome their anxiety rather than making their own decisions according to the situation (Abbassi & Sta, 2019). In context of entrepreneurship, perceived self-confidence relates to perceived competency of people in conjunction with their business

affairs and such people firmly believe in their capability of performing necessary tasks (Chen, Greene, & Crick, 1998). Moreover, persons who believe on their abilities and skill to be adequate for attaining success with new business venture are more motivated to put necessary effort which strengthens their attitude towards entrepreneurship (Karabulut, 2016).

Among personality traits, self-confidence is an important one that can significantly determine entrepreneurial attitude in individuals (Majumdar & Varadarajan, 2013). The thing which mainly connects high self-confidence with entrepreneurship is the surety of success which is developed in an individual due to self-confidence. It further empowers a person to take risks, search for innovative resolutions to the problems and to demonstrate tenacity and perseverance. Such attitudes eventually lead to victory and this again elevates self-confidence and it becomes a cycle (Abbassi & Sta, 2019). Denis, Ariyaratne, and Perera (2016) stated that the higher individuals are on the scale of self-confidence the more they feel the merit for succeeding in whatever they undertake, and this makes them unhesitant in allocation of necessary efforts. Also, a self-confidence person sees failure as ordinary mistakes which benefit them immensely. Özlem and Cansu (2014) conducted a study on 209 young graduates in 3 Turkish universities. They concluded that self-confidence positively influence the behavior of a person towards entrepreneurship. (Abbassi & Sta, 2019; Göksel & Science, 2011; Kundu & Rani, 2008) also reached the same conclusion.

2.11 Relationship of Entrepreneurial Attitude and Entrepreneurial Capacity

Personal attitude of a person indicates that person's attitude towards main behavior that reflects his or her expectations regarding the wanted and unwanted consequences that results from that main behavior. In entrepreneurial context, the main behavior is that of entrepreneurship. A person can be significantly influenced and encouraged to pursue a goal by altering his or her thinking and mind-set which makes an overall attitude (Mueller & Thomas, 2001). Uddin and Bose (2012) state that personal attitude depends on the outline of an individual's beliefs and evaluations that are associated with those beliefs. In other words, an individual's behavior depends on his or her attitudes and

beliefs and these attitudes and beliefs have a crucial part in shaping that person's actions. Ajzen (1991) in his theory of planned behavior stated that personal attitude of a person is the extent to which a person assesses his or her main behavior in negative or positive way. He also stated that personal attitude that an individual has is his or her personal pull towards the target behavior. In relation of entrepreneurship, attitude towards entrepreneurship is seen as a significant factor that influence the entrepreneurial capacity of a person in a very positive way (Clarysse et al., 2011).

Carsrud and Brännback (2011) stated in his study that if an individual possess a positive attitude for the initiation of his or her own business as a core behavior then it aligns obviously with his or her overall ambition of life and there are more chances that the individual will dig for more opportunities and resources to start an enterprise which is his or her entrepreneurial capacity (Clarysse et al., 2011). Dahalan et al. (2015) stated in their study that opportunity recognition (i-e entrepreneurial capacity) in terms of money positively affect a person's entrepreneurial attitude that is his or her attitude towards starting a business. When a person recognizes the opportunity in form of capital or any resource than that person's attitude towards entrepreneurship becomes more passionate. Likewise, an individual's positive attitude towards entrepreneurship automatically increases his or her entrepreneurial capacity by increasing his or her capability to identify opportunities to start a business and to do other entrepreneurial activities (McCline, Bhat, Baj, & Practice, 2000).

2.12 Relationship of Entrepreneurial Education and Entrepreneurial Capacity

Entrepreneurial education helps in the development and enhancement of entrepreneurial qualities in a human being in terms of ambition, pioneering and drive. Meanwhile, it also develops strategic abilities and resources which is required in a person who want to become entrepreneur but mainly entrepreneurial education helps individuals to discover and then recognize the opportunities and resources for entrepreneurial activities which is entrepreneurial capacity of a person (Liu et al., 2019). The intended entrepreneurs participate in entrepreneurial education and training with the expectation of improving

their entrepreneurial capabilities and abilities to create, identify and pursue entrepreneurship related opportunities (Roomi & Harrison, 2008).

Solomon, Duffy, and Tarabishy (2002) presented the idea that the main objective of entrepreneurial education should be to help the students in differentiating between managerial skills and entrepreneurial traits as where managers retain and maintain the capital and progress of businesses, entrepreneurs seek to bring innovation and grasp new opportunities and resources for the business activities. In the agreement of this idea, entrepreneurial education needs to include such courses in which entrepreneurial processes can be taught including negotiation skills, leadership, qualities, new product development, innovative thinking and exposure to technological and other innovation so an individual when come across these innovations then he or she is capable of recognizing and grasping these technological advances for successful entrepreneurship (Sousa, Carmo, Gonçalves, Cruz, & Martins, 2019).

The cognitive elements that are related to knowledge and skills essential for business start-up studied in the theory of human capital, which generates a direct relationship of knowledge and productivity. Knowledge encase the individuals to elevate the level of their cognitive capacity (Díaz-Casero et al., 2012). Therefore, in entrepreneurial context, if more opportunities for business exist then individuals with better knowledge can more efficiently perceive and utilize these opportunities (Westhead et al., 2009). According to Davis and Newstrom (1981) any possible way of acquiring entrepreneurial knowledge including formal and informal education, enhances entrepreneurial capacity in an individual. experience, such as working or creating a company, and possessing adequate abilities. As per (Gozali et al., 2020), the factors based on knowledge make strong impact on a person's intention to start up a business and that person that increase his or her capacity to hunt for resources and opportunities. Levie and Autio (2008) also evaluated direct impact of entrepreneurial education and training on entrepreneurial activities and approved the hypothesis that such education positively affects entrepreneurial capacity in individuals.

2.13 Relationship of Human Personality Traits and Entrepreneurial Capacity

It is a believed fact that learning and education can develop an individual's personality in any way. The theory of Human Capital says that knowledge, education and learning support individuals in increasing their cognitive capabilities, which lead them to more productivity and efficiency in all the potential activities (Karabulut, 2016). It is a fact that entrepreneurial capacity is made up of cognitive abilities particularly in terms of evaluating economic potential latent in new knowledge, and in designing ways of transforming the potential latent into economic value that is realizable (López-Meri et al., 2020). Therefore, if an individual wants to develop his or her entrepreneurial capacity then it can be done by altering the essential aspects of his or her personality which is more possible through relevant training and education (Denis et al., 2016). The big 5 personality traits are most effective in developing any type of entrepreneurial quality in a person (Zhao et al., 2010). Extraversion is one of the personality traits of big 5 and it facilitates in building entrepreneurial capacity by helping in identification of latent opportunities and convincing other relevant people for the viability of potentials. When individuals are outgoing and socially skillful then they are more capable of building good supportive network, which helps them in improving their entrepreneurial capacity and thus entrepreneurial success in future (Denis et al., 2016). According to outcomes of the study conducted by Antoncic et al. (2015), openness to experience, which is another component of big 5 personality trait positively affect technological developments because an individual with rigid mindset that is not open to the experiences is not likely to succeed in displaying entrepreneurial capacity that is in grasping new opportunities. Entrepreneurship particularly involves the process of thinking in new and innovative ways and identifying unforeseen business opportunities and the exploring them in creative and constructive way.

2.14 Business Incubators

Institutions with aim to provide support services to small and emerging business ventures are known as business incubators. Services of business incubation centers vary from provision of technical assistance to consultation and other administrative services along

with financial support to these projects. For development of local community small projects and businesses play important role and incubators support these small projects and business through provision of resilience which makes continuation possible through support (Hausberg & Korreck, 2020). Business incubators play an important role in constant evaluation and measurement of performance. This evaluation ensures the achievement of goals that business seeks. Success of business incubators depends upon development and graduation of successful businesses which are capable to survive on basis of continuation and excellence. One of the foundation points for the establishment and development of new business in today's world is by business incubation centers. Performance of business incubation centers is evaluated by feedback from business operations which helps in betterment (Shehada, El Talla, Al Shobaki, & Abu-Naser, 2020). Business incubators serve as an important source to support domestic entrepreneurship which allow entrepreneurs to develop successful business ventures. Alleviation of poverty can be achieved by enabling domestic entrepreneurship. Entrepreneurship promoted by incubation centers has proved to be helpful in development of economy. Corporate philanthropic funding sometimes also supports domestic economy by development and investment in incubation center as it provides support to small ventures and business centers (Haugh, 2020). Business incubators provide infrastructure for business operations. Incubation centers provide partnership for marketing and mentoring of business ventures. Entrepreneurship is promoted by business incubation centers through national and global professional networking. Support and protection are provided to new ventures by incubation centers before entering competitive market (Gozali et al., 2020).

2.15 Business Incubators and Entrepreneurship

Promotion of entrepreneurship is essential for growth and stability of economy. Entrepreneurs use investments from different sources for creation of knowledge which develops substantial economic growth. Young and educated people are more attracted to become entrepreneurs as entrepreneurship is a key source of job creation, economic revolution and business development. Successful innovations are developed by entrepreneurs by inventing new ideas and inventions. When labor market is not offering

many jobs, entrepreneurship is much liable thing as it is concerned with attitude of individual regarding start of new business (Sarasvathy, Dew, & Venkataraman, 2020). Research suggests that entrepreneurship can only be successful when economic environment is favorable. Effective strategies for the promotion of entrepreneurship are provided by business incubation centers. Business incubators provide diversification of business opportunities and act as agent to stimulate growth. Entrepreneurs are assisted by business incubation centers in early stage of their development by provision of business space with low cost and assistance of entrepreneurs through multiple business services. Business incubators play a significant role in development of entrepreneurship by moderating business startups and government regulations (Nicholls-Nixon *et al.*, 2020). Opportunities for integration of education, management, new skills with training and initial working for small companies are provided by business incubation centers. Business incubators promote entrepreneurial practices by creation of profitable environment for entrepreneurs. Implementation of guidelines and industrial development foundation state path is also motivated by business incubators (Li, Ahmed, Khan, & Naz, 2020). In global economy one of the latest concepts of promotion of entrepreneurship is through business incubation. Business incubators facilitate the strategic performance for entrepreneurs. Enhancement of operational performance for the small business and tools for strategic development to achieve efficiency in new ventures and small business is provided by business incubation centers (Rathore & Agrawal, 2020). Business incubation centers also promote development of social capital which proves to be helpful for flourishing business. Business incubation center provides opportunities to individuals for the development of individual social capital as well as for the collective social capital. Development of social capital serves as a source of bridging distance between entrepreneurs and external agents. This bridging of gap delivers apposite impact on achievement of management efficiency by entrepreneurs. This gives entrepreneurs basis for group identity so that they can initiate their business in a better way (Redondo, Camarero, & Journal, 2019). Business incubators provide accelerating roles for entrepreneurship. Business incubators are the innovative structures to provide quality knowledge and intensive services for the development of new businesses. Business incubation helps entrepreneurs to achieve efficacy and expansion of innovation within

their business plans and structures (Fernandez et al., 2019). Business incubators act as facilitator for entrepreneurs to develop social inclusion and inclusive growth. Business incubators can promote economic growth by successfully regulating entrepreneurship to develop innovation and sustainable growth. Business incubators provide range of policies and social support to entrepreneurs which helps them to develop their business due to which incubators play essential role in promotion of economic growth (Baskaran, Chandran, Ng, & Society, 2019).

2.16 Theoretical Framework

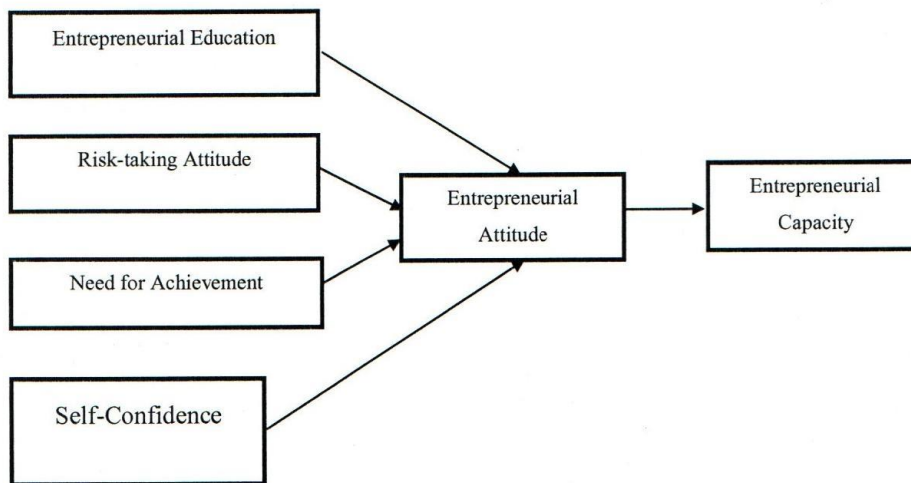


Figure 1.1: Theoretical framework

a) Independent variables

Entrepreneurship education, self-confidence, need for achievement and risk-taking attitude

b) Mediator

Entrepreneurial attitude

c) Dependent variable

Entrepreneurial capacity

2.17 Hypotheses

H1: Entrepreneurial education has positive impact on entrepreneurial capacity with mediating role of entrepreneurial attitude

H2: Risk-taking has positive impact on entrepreneurial capacity with mediating role of entrepreneurial attitude

H3: Need for achievement has positive impact on entrepreneurial capacity with mediating role of entrepreneurial attitude

H4: Self-confidence has positive impact on entrepreneurial capacity with mediating role of entrepreneurial attitude

CHAPTER 3

METHODOLOGY

3.1 Design of Study

Design of this research is explanatory; it lays the ground for the examination of entrepreneurship career development. This research explains the determinable factors for the career development in entrepreneurship which can explain even further development in this area due to its explanatory nature. Development of career in entrepreneurship is based on capacity building and attitudes relevant to it. Significance of capacity building and attitude are required to establish entrepreneurial behaviors. For this reason, entrepreneurship education is considered to analyze its impact on entrepreneurial attitude as well as entrepreneurial capacity. Other than this impact of personality traits on both capacity and attitude is also analyzed. Personality traits include risk taking attitude of individual, need for achievement in individual and self-confidence that an individual possess. Research design of this study is quantitative. In this study relationship between one dependent variable, one mediator and four independent variables is determined to form basis for the analyses of entrepreneurial career development.

3.2 Research Approach

Deductive approach is used in this study to see the impact of personality traits and entrepreneurial education on entrepreneurial career development. In deductive reasoning already existing studies on entrepreneurship are used to design framework of study. Relationship between dependent variable (entrepreneurial capacity), mediator (entrepreneurial attitude) and independent variables (entrepreneurship education, risk taking factor, self-confidence and need for achievement) is used to construct hypotheses of study. Information is then collected and data is analyzed to examine the validity of these constructed relationships so that determinants of entrepreneurial career can be determined.

3.3 Population and Sample

Population shows whole set of individuals or units associated with a research purpose. It is collection of data or information from individuals for research analysis. Analysis of entire population is inconvenient for the purpose of data collection owing to the time and cost constraints however it is suggested to obtain a sample so that only relevant information is analyzed (Ranganathan & Pramesh, 2019). In this research analysis all the incubation centers serve as population that are associated with technology, business or IT parks. A sample of 150 entrepreneurs is drawn from the population set to gather data and analyzed the impact of dependent and independent variables. It was aimed to collect data only from those entrepreneurs who are successfully running their businesses. Initially, more than 200 questionnaires were distributed but not all questionnaires were accurately filled back however 50 questionnaires were discarded. Sampling of population is based on non-probability purposive sampling. Purposive sampling is subjective in nature and is based on judgment. Researcher implicitly chooses representative of sample which are most accurate based on instincts of his own (Parichha, Basu, & Bandyopadhyay, 2019).

3.4 Sampling Technique

For most effective use of limited resources purposive sampling is done in order to collect information that is most ideal for research analysis. This involves selection and identification of particularly those individuals who are most knowledgeable about the information. In our research analysis those individuals are the successful entrepreneurs from incubation centers from where relevant data associated with research study can be collected. Purposive sampling is one to extend the efficiency of data collected and to gather only relevant data. (Ames, Glenton, & Lewin, 2019).

3.5 Data Collection Sources

Data collection sources are the tools which provide relevant direction for the construction of framework of research study. Data can be collected from primary as well as from secondary sources of data. Primary sources of data provide original and unique data which is collected by researcher himself. Primary data is collected through observations, surveys, interviews etc. while secondary data is collected from already existing data. Secondary data is not pure form of data as it may have undergone statistical treatment,

but it is easy to collect. Secondary data sources include general publications, websites, internal records, journal articles and books (Gray, 2019).

In this research primary sources of data are used to collect information. Primary data is collected through questionnaires which were filled by selected entrepreneurs from incubation centers based on purposive sampling.

3.6 Research Instruments

Research instruments consist of tools which are used to generate data. In this study, research instrument is questionnaire adapted from previously existing articles on entrepreneurship. Source of questionnaire is relevant articles on the entrepreneurial attitude and entrepreneurial capacity to develop entrepreneurial career based on personality traits and entrepreneurship education.

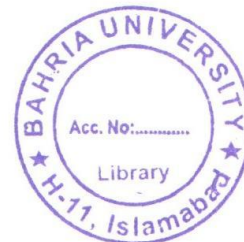
The questionnaire used in this study includes total 29 questions which are related to 6 variables and responses are recorded against five-point Likert scale in which response vary from strongly agree to strongly disagree. Frequency distribution includes demographic information based on four units including gender, age, qualification and income of respondents.

Four questions of entrepreneurial capacity were adapted from (Hunjra, Ahmad & Niazi, 2011). Two questions of entrepreneurial education were adapted from (Liñán, Rodríguez-Cohard, & Rueda-Cantuche, 2011). Five questions related to entrepreneurial attitude were adapted (Robinson, Stimpson, Huefner, & Hunt, 1991). Seven questions related need of achievement were adapted from (Vodă, & Florea, 2019). Six questions related to risk-taking attitude were adapted from (Lee & Tseng, 2015). Five questions related to self-confidence were adapted from (Hian, 1996).

3.7 Analysis Procedures

To understand the relationship among variables data collected from primary source is subjected to SEM (Structural Equation Modeling) to determine relationship among the variable and other characters of variable to deduce significant results of this research analysis. Smart PLS software is used for this purpose and it helps to run statistical

operations in such a way that meaningful results can be drawn efficiently. Smart PLS is useful technique as it tells about the path coefficient of variable. Path coefficients inform the degree to which dependent and independent variable are linked. Validity of questionnaire is a serious concern for researchers. It measures the extent of accuracy of designed questionnaire. High validity value suggests that questionnaire is relevant to variables of concern. Validity can either be discriminate or convergent as shown by the Smart PLS software, which reflects the degree of relevance of questions in questionnaire. Reliability of questionnaire can also be checked by using Smart PLS. Reliability value shows that questionnaire used is either useful or not. Purposed value for the reliability is 0.7. Below 0.7 reliability values show that questionnaire used to collect data is not reliable source it might not be related to desired variables for research properly. Mean standard deviation is also a component to which Smart PLS provide relevant information and it is also related to relevance of questionnaire to design research plan. Mean standard deviation tells about the symmetry of questionnaire, as in our case it tells how entrepreneurial attitude affects entrepreneurship education and how it is influenced by personal traits.



CHAPTER 4

RESULTS AND FINDINGS

Table 4. 1: Frequency distribution

Characteristics	Percentage
Gender	
Male	78.7 %
Female	21.3%
Education	
Other	24.0%
Graduation	44.7%
Postgraduation	31.3%
Income	
Below Rs 100,000	24.6 %
Rs 100,001 to Rs 200,000	36.0%
Rs. 200,001 to Rs 300,000	34.6%
Above Rs 300,000	4.80%
Marital Status	
Single	58.6%
Married	41.4%

Demographic profile shows that 21.3 % female entrepreneurs participated in the survey and 78.7 % male entrepreneurs participated in the survey. Survey participants approached purposively without biasness. In response to the question about education 24 % opted the option other than graduation or postgraduation. 44.7 % participants mentioned their qualification “Graduation” and other 31.3 % participants mentioned their qualification “Post-graduation”. In response to the question about income 24.6 % opted the option income below Rs 100,000 per month. 36.0 % participants mentioned their income in range between Rs 100,001 to Rs 200,000 per month and 34.6 % participants mentioned their income in range between Rs 200,001 to Rs 300,000 per month. Only 4.8 % participants mentioned their income is higher than Rs 300,000 per month. To answer the question about marital status, 58.6 % participants are single and other 41.4 % participants are married.

Table 4. 2: Correlation Analysis

		EC	EA	EE	RTA	NA	SC
EC	Pearson Correlation	1	.644**	.445**	.275**	.219**	.297**
	Sig. (2-tailed)		.000	.000	.001	.007	.000
	N	150	150	150	150	150	150
EA	Pearson Correlation	.644**	1	.438**	.285**	.240**	.399**
	Sig. (2-tailed)	.000		.000	.000	.003	.000
	N	150	150	150	150	150	150
EE	Pearson Correlation	.445**	.438**	1	.423**	.360**	.331**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	150	150	150	150	150	150
RTA	Pearson Correlation	.275**	.285**	.423**	1	.448**	.381**
	Sig. (2-tailed)	.001	.000	.000		.000	.000
	N	150	150	150	150	150	150
NA	Pearson Correlation	.219**	.240**	.360**	.448**	1	.403**
	Sig. (2-tailed)	.007	.003	.000	.000		.000
	N	150	150	150	150	150	150
SC	Pearson Correlation	.297**	.399**	.331**	.381**	.403**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	150	150	150	150	150	150

Table 4.2 shows that entrepreneurial capacity and entrepreneurial attitude have positive correlation of 64.4 percent, entrepreneurial capacity and entrepreneurial education have positive correlation of 44.5, risk taking attitude and entrepreneurial capacity have positive correlation of 27.5 percent, need for achievement and entrepreneurial capacity have positive correlation of 21.9 percent and self-confidence and entrepreneurial capacity have positive correlation of 29.7 percent.

Table 4. 3: Convergent validly and reliability

Variables	Items	Loadings	T-value	p- value	α	CR	AVE
Attitude					0.773	0.846	0.526
	A-1	0.578	7.037	0.000			
	A-2	0.729	13.720	0.000			
	A-3	0.787	25.136	0.000			
	A-4	0.779	20.621	0.000			
Self-confidence	A-5	0.734	14.449	0.000			
					0.733	0.817	0.530
	SC-1	0.562	7.752	0.000			
	SC-2	0.737	17.651	0.000			
	SC-3	0.692	12.646	0.000			
	SC-4	0.547	6.150	0.000			
Need for Achieve	SC-5	0.703	12.547	0.000			
	SC-6	0.668	10.059	0.000			
					0.807	0.859	0.504
	NA-1	0.737	18.120	0.000			
	NA-2	0.748	19.007	0.000			
	NA-3	0.772	21.709	0.000			
Risk Taking	NA-4	0.692	13.621	0.000			
	NA-5	0.620	8.904	0.000			
	NA-6	0.681	13.333	0.000			
					0.759	0.838	0.512
	RT-1	0.618	6.757	0.000			
Education	RT-2	0.611	9.063	0.000			
	RT-3	0.672	10.864	0.000			
	RT-4	0.845	25.623	0.000			
	RT-5	0.800	25.302	0.000			
					0.737	0.882	0.789
Entrepreneurship Capacity	E-1	0.916	89.114	0.000			
	E-2	0.861	33.748	0.000			
					0.762	0.848	0.587
	ES-1	0.587	7.401	0.000			
ES-2	0.828	21.956	0.000				
ES-3	0.755	14.789	0.000				
ES-4	0.864	55.479	0.000				

Table 4.3 explains the factor loading score along with their t values and p values. It is shown in above table that items of attitude of entrepreneurs range from 0.578 to 0.787, items of self-confidence of entrepreneurs range from 0.562 to 0.737, items of need of achievement of entrepreneurs range from 0.620 to 0.772, items of risk taking attitude of entrepreneurs range from 0.611 to 0.845, items of education of entrepreneurs range from 0.916 to 0.861 and items of entrepreneurship capacity range from 0.587 to 0.864. Results show that all items related to different constructs hold t values > 1.96 and p values < 0.05. Next, to the reliability statistics, composite reliability posits all values > 0.80, AVE values are equal or greater than 0.50 (Fornell and Larcker, 1981) and Cronbach's alpha values > 0.70 (Nunnally, 1978). Cronbach's alpha value of attitude of entrepreneurs is 0.773 > 0.70, Cronbach's alpha value of self-confidence of entrepreneurs is 0.733 > 0.70, Cronbach's alpha value of need for achievement of entrepreneurs is 0.807 > 0.70, Cronbach's alpha value risk taking attitude of entrepreneurs is 0.759 > 0.70, Cronbach's alpha value education of entrepreneurs is 0.737 > 0.70 and Cronbach's alpha value entrepreneurship capacity is 0.762.

Table 4. 4: Discriminant Validity and Mean Standard deviation

Variables	Mean	Std.	1	2	3	4	5	6
Attitude	3.504	0.049	0.725					
Education	4.439	0.021	0.424	0.888				
Entrepreneurship	4.127	0.032	0.488	0.405	0.766			
Need for Achievement	3.549	0.046	0.501	0.445	0.470	0.710		
Risk Taking	3.545	0.050	0.497	0.515	0.445	0.475	0.716	
Self Confidence	3.244	0.063	0.428	0.537	0.505	0.425	0.435	0.65

Discriminant validity refers to the degree to which items/questions measure of a construct yet at the same time these items/questions must not be correlated to variables/constructs (Fornell and Larcker, 1981). Discriminant validity values of all constructs are below than convergent values mostly range in between 40 % to 50 %. While mean value of attitude of entrepreneurs is 3.504 along with std. deviation 0.049, mean value of education of

entrepreneurs is 4.439 along with std. deviation 0.021, mean value of entrepreneurship is 4.127 along with std. deviation 0.032, mean value of need for achievement of entrepreneurs is 3.549 along with std. deviation 0.046, mean value of risk taking attitude of entrepreneurs is 3.545 along with std. deviation 0.050 and mean value of self-confidence of entrepreneurs is 3.244 along with std. deviation 0.063.

Table 4. 5: Path Coefficients

Structural Path	β	t	p	Hypotheses
Education → Attitude	0.464	6.544	0.000	Supported
Need for Achievement → Attitude	0.156	2.191	0.031	Supported
Risk Taking → Attitude	0.146	2.270	0.025	Supported
Self Confidence → Attitude	0.198	2.473	0.015	Supported
R-Square (E, NA, RT, SC → Attitude)		0.642		

Structural model shows path coefficients of all constructs. Education of entrepreneurs show significant positive relationship with attitude of entrepreneurs, beta value is (0.464) along with t value (6.544) and p value = (0.000). Need for achievement of entrepreneurs show significant positive relationship with attitude of entrepreneurs, beta value is (0.156) along with t value (2.191) and p value = (0.031). Risk taking attitude of entrepreneurs show significant positive relationship with attitude of entrepreneurs, beta value is (0.146) along with t value (2.270) and p value = (0.025). Self-confidence of entrepreneurs show significant positive relationship with attitude of entrepreneurs, beta value is (0.198) along with t value (2.473) and p value = (0.015). Adjusted R-square value is 0.642.

Table 4. 6: Total Indirect Effect on Entrepreneurial Capacity

Structural Path	β	t	p	Hypotheses
Education → Entrepreneurial Capacity	0.330	5.738	0.000	Supported
Need for Achievement → Entrepreneurial Capacity	0.111	2.182	0.031	Supported
Risk Taking → Entrepreneurial Capacity	0.104	2.261	0.026	Supported
Self Confidence → Entrepreneurial Capacity	0.141	2.431	0.017	Supported
Attitude → Entrepreneurial Capacity	0.710	17.564	0.000	Supported
R-Square (Attitude → Entrepreneurship Capacity)		0.504		
R-Square (E, NA, RT, SC → Attitude)		0.642		

Next, it is observed that education of entrepreneurs does not significantly influence entrepreneurship capacity, β value = (0.330), t value (5.738 > 1.96) and p value = (0.000 < 0.05). The influence of need for achievement of entrepreneurs is significant on entrepreneurship capacity, β value is (0.111), t value is (2.182) and p value = (0.031). Furthermore, it is observed that risk taking attitude of entrepreneurs significantly influence entrepreneurship capacity, β value = (0.104), t value (2.261) and p value = (0.026). The influence of self-confidence of entrepreneurs is significant on entrepreneurship capacity, β value is (0.141), t value is (2.431) and p value = (0.017). On the other hand, total impact of attitude on entrepreneurial capacity is 0.710, t value is (17.564) and p value = (0.000). Adjusted R-square value is 0.504.

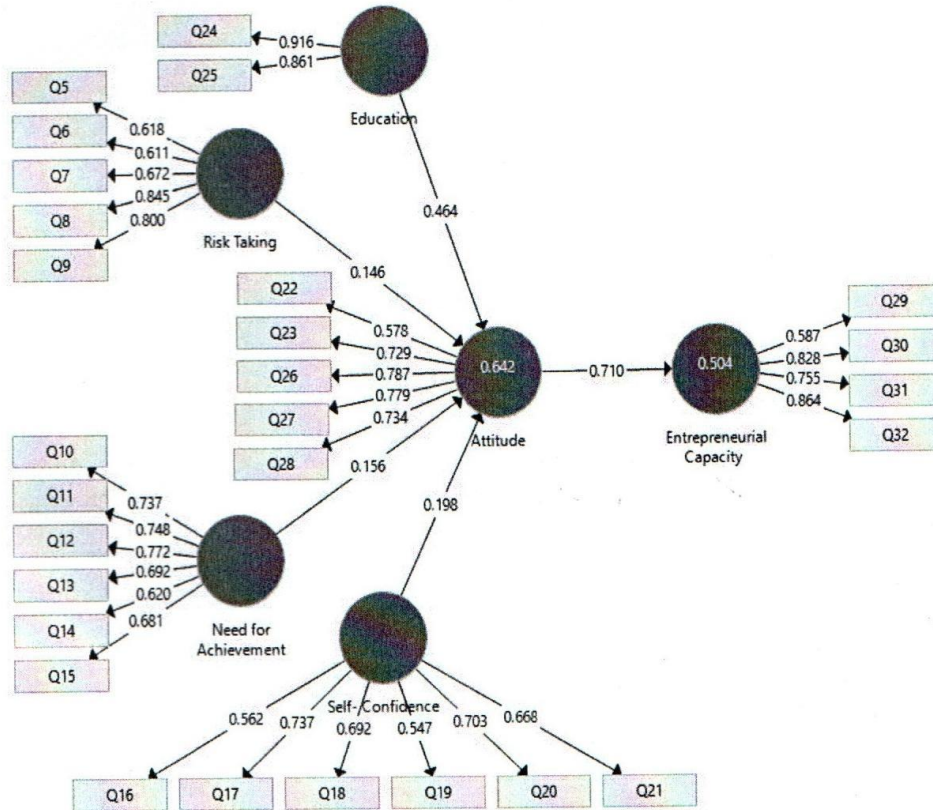


Figure 4. 1: Structural Equation Modeling Diagram

Table 4.7: Results Summary

Relationship Path	Direction	Decision
Education → Attitude	Positive	Supported
Need for Achievement → Attitude	Positive	Supported
Risk Taking → Attitude	Positive	Supported
Self Confidence → Attitude	Positive	Supported
Education → Attitude → Entrepreneurial Capacity	Positive	Supported
Need for Achievement → Attitude → Entrepreneurial Capacity	Positive	Supported
Risk Taking → Attitude → Entrepreneurial Capacity	Positive	Supported
Self Confidence → Attitude → Entrepreneurial Capacity	Positive	Supported

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Discussion

5.1.1 Impact of Education on Entrepreneurial Attitude, Entrepreneurial Capacity and role of Business Incubators

Entrepreneurial education is relevant to develop competencies that are essential to set up new business ventures. Definition of entrepreneurship which aims at development of corporate, new and independent ventures is in alignment with entrepreneurial education. Development of skills and competencies which are essential to develop and realize ideas is also associated with entrepreneurial education. So, entrepreneurial education is based on wider entrepreneurship definition which is aimed at development of entrepreneurial attitude and entrepreneurial capacity to enhance creative, self-resilient, proactive and opportunity-oriented traits of an individual. Entrepreneurial education is thus based on narrow definition of entrepreneurship. Value creation by entrepreneurship is based on entrepreneurial education and it aims to develop new values, new ventures and independent organizations based on ideas and opportunities devised by entrepreneurs because of their education. Entrepreneurial education is aimed at development of entrepreneur's attitude and entrepreneur's capacity to develop key competencies and engage students with incubation centers to develop successful and ideal plans to address societal challenges. Entrepreneurial attitudes are significantly affected by entrepreneurial education as shown by analysis above and they aim towards individual's development which is associated with fostering self-resilience and opportunity seeking behavior of individuals (Lackeus, 2017). Entrepreneurship education has positive impact on entrepreneurial attitude as entrepreneurship education is associated with entrepreneurial intentions relevant to personality traits which state that these traits influence decision of individuals to start business. Entrepreneurial intentions of students can be enhanced through entrepreneurial education. Education intervenes with cognitive factors of students based on self-efficacy to develop their intentions and behaviors which define

their attitude towards entrepreneurship (Li & Wu, 2019). Entrepreneurial education is associated with entrepreneurial attitude as it is associated with development of tools essential for working in incubation centers. Entrepreneurial education enhances attitude associated with financial planning and rational investment. Economic attitude of students relevant to successful development of business ventures is associated directly with student investment activities for consumer opportunities. This shows that significant positive relationship between entrepreneurial education and entrepreneurial attitude exists (Zabelina, Deyneka & Tsiring, 2019). Impact of entrepreneurship education on entrepreneurial capacity is positive and significant. Building of professional attraction towards entrepreneurship is possible through education which focus on enhancement of entrepreneurial capacity through development of specific training recognition of opportunity that could be used to develop business idea. Entrepreneurial capacity allows developing an opportunity that can be realized and used to harvest significant outcomes. Incorporation of incubation center in this aspect of building capacity also plays significant role as it allows interaction with experts. Students with insignificant previous entrepreneurship experiences can rely on their entrepreneurial capacities developed through entrepreneurial education that allows them to develop new business ventures (Srivastava, Satsangi & Satsangee, 2019). Incubation centers play significant role in entrepreneurial education for successful entrepreneurship and technology commercialization where only classroom teaching is not enough. To begin a journey towards the new venture creation and to contribute towards growth and survival of business the incubators provide real platform to young entrepreneurs to implement their learning which they gained from entrepreneurship education. Promotion of entrepreneurship and development of entrepreneurial culture is significantly developed by business incubation centers which provide direction to entrepreneurial education (Li, ur Rehman & Asim, 2019). Development of new ventures by providing support environment through combining entrepreneurial attitude and entrepreneurial capacity is motivated by entrepreneurial education which is supported by business incubation centers. It enables university students to function more effectively and efficiently to implement their entrepreneurial skills in development of new and successful business plans to achieve functional business ventures (Zreen *et al.*, 2019).

5.1.2 Impact of Personality traits on Entrepreneurial Attitude, Entrepreneurial Capacity and role of Business Incubators

Personality traits are closely associated with entrepreneurial attitudes and entrepreneurial capacity. Personality traits are associated with performance outcomes. Personality traits such as risk-taking attitude, need for achievement and self-confidence are built on the basis of conscientiousness and emotional stability of an individual. These traits are associated with higher degree of involvement in business idea by entrepreneurs those who can help businesses flourish through development of openness, extraversion and agreeableness (Szerb & Imreh, 2007). These traits are associated with training proficiency that can help entrepreneurs to achieve positive entrepreneurial attitude and develop entrepreneurial capacity (Kuratko, 2016). Personality traits of entrepreneurs are associated with development of entrepreneurial intention, motivation and behavior. Entrepreneurial personality traits positively predict entrepreneurial passion which provide a mediation link between ideas and implementation of such ideas into ventures and new businesses. Development of entrepreneurial capacity is associated with development of entrepreneurial characteristics that are relevant to acting up in right time and taking right decisions. These personality traits include self-confidence, need for involvement and risk-taking behavior and these are directly associated with development of behaviors associated with successful implementation of plans (Mueller & Thomas, 2001). In development of entrepreneurial venture, business incubators play a great role. Business incubators are the heart of entrepreneurial ecosystems. Business incubators provide an infrastructure to combine the entrepreneurial capacity, entrepreneurial attitudes, technological learning, entrepreneurial opportunities, human capital, innovative capital, social capital, knowledge production and entrepreneurial culture to form successful business ventures. Business incubators facilitate the development of entrepreneurial attitudes and entrepreneurial capacities through provision of technological and mentorship help which provide significant dimension to personality traits (Hausberg & Korreck, 2020). Entrepreneurial capacity is determined by specific psychological and personality traits which includes a tolerance for ambiguity, risk taking attitude, internal locus of control, need for achievement, self-confidence, beliefs and propensity. These are the capacity factors that help to bring innovation and value creation in a business venture.

Results of this study shows that there is significant positive impact of personality traits on entrepreneurial capacity as it provides coping and problem-solving capabilities. Entrepreneurs with higher score on personality traits are more capable in performance (López-Meri et al., 2020). Entrepreneurial attitudes show the willingness of a person to engage in a business idea and personality traits guide the direction for that person. Personality traits are associated with development of ambitious aspects of entrepreneurial characters in an individual. Entrepreneurial attitude is positively associated with personality traits which include risk taking behavior, need for achievement and self-confidence. These traits in an individual are promoted by the environment shaped by business incubation centers (Dahalan et al., 2015).

5.1.3 Impact of Entrepreneurial Education on Entrepreneurship

Building of knowledge and skills required for the successful development of entrepreneurship is done through entrepreneurial education. Entrepreneurship education is required to know “about” and “for purpose of” learning about development of business. Currently entrepreneurship education is being part of primary, secondary and tertiary level of educational institutions. Entrepreneurial education is essential to reinforce the impact of personality traits on entrepreneurial intentions. World Bank (2008) also highlighted the importance of entrepreneurial education as a vital factor to increase employment rate in a country. Entrepreneurial activities are essentially required for the innovation, economic growth and employment for which entrepreneurial education is essential (Remeikiene *et al.*, 2013). Entrepreneurial education is essential for young individuals to turn them into enterprising individuals those who develop strong entrepreneurial thinking required for the development of sustainable communities through economic growth. Entrepreneurial educational courses are added as a compulsory part in majority of business, management and social sciences educational program as it is essential for the development of ability required to plan and manage business projects and achieve desired objectives. Entrepreneurial education makes an individual better able to seize opportunities and provides essential training to establish social and commercial activity in a reliable way (Turner & Gianiodis, 2018). Entrepreneurial education is essential as it not only focus on success development of business entity, but it is also associated with development of critical thinking capacities in

an individual which gives confidence by developing empowerment and self-worth. So entrepreneurial education is not only associated with creation of business. Entrepreneurial education is essential for an individual as it enables to recognize opportunities in one's life, development of essential resources required to generate new ideas and pursue opportunities, develop ability to operate and create new entity and develop ability to think in critical and creative manner (Raposo & Do Paco, 2011). Primary focus of entrepreneurial education in majority of institutions is to enable individuals to develop industrial economy by self-development of individuals. Entrepreneurial education can now be considered as one of the factors of production required for the successful development of business organization. Entrepreneurship courses are essential as they focus on the development of capabilities and abilities required to develop a business plan which is promising and ensures growth and development. Entrepreneurial education integration in university courses is essential particularly in developing countries to enable qualities in young individual required to add value to economic process and generate innovative ideas (Roy & Mukherjee, 2017).

As research has shown that entrepreneurial activity is related to the attitudes and capacities of the entrepreneurs. The entrepreneurial attitude is the important factor that can lead towards the entrepreneurial capacity. Therefore, it is necessary to develop the entrepreneurial attitude in youth so that the entrepreneurial capacity can be developed in turn. Attitudes can be developed through focusing on personality traits because entrepreneurs need an ability to accomplish their tasks. There is also a need to develop innovation, self-efficacy and opportunistic behaviors in youth to develop entrepreneurial attitude. Therefore, the entrepreneurial attitude development is very necessary to achieve the entrepreneurial capacity. Practitioners and educationists should focus on entrepreneurial attitude because it is directly correlated with the financial situation. If educationists and practitioners become successful in developing entrepreneurial attitude in youth, then the future entrepreneurs will be successful to think out of box. They key ingredient that can help in building this attitude is motivation and clear understanding. Mentors, educationists and practitioners can help the young entrepreneurs to build habits of never giving up, strong belief, self-confidence and right attitude. Practitioners and educationists also need to focus on development of programs that can create favorable

environments for young entrepreneurs. These programs must be designed in a way that can encourage the entrepreneurial attitude and a series of values that can help entrepreneurs to foster.

5.2 Conclusion

This research adds to the existing literature by emphasizing on the personal traits which enhanced the entrepreneurial capacity of entrepreneurs and by showing the importance of entrepreneurship education in entrepreneurial field. The purpose of this study was to show the importance of entrepreneurship education in entrepreneurial field. For this reason, the impact of entrepreneurship education on entrepreneur's capacity was measured. The analysis proved the positive impact of entrepreneurship education on entrepreneurial attitude and entrepreneur's capacity. The impact of other independent variables which are personal traits were also measured, to find out what is enhancing entrepreneur's capacity, who did not take any entrepreneurship education in past. All the personal traits that were chosen in the study showed significant positive impact on entrepreneurs' capacity. The personal traits measured in this study are risk taking attitude, self-confidence and need for achievement. The analysis showed that risk taking attitude has positive impact on entrepreneurial attitude and it has significant indirect impact on entrepreneurial capacity. It showed that self-confidence has positive impact on entrepreneurial attitude and it also has significant indirect impact on entrepreneurial capacity. It proved that the need for achievement in entrepreneurs has positive impact on entrepreneurial attitude and it has significant indirect impact on entrepreneurial capacity.

It is concluded that entrepreneurship education is necessary along with personality traits and entrepreneurial attitude to enhance entrepreneur's capacity. Key driver to raise living standards is considered as entrepreneurship. Entrepreneurship is associated with the provision of major innovation or creative destruction which helps to boost economy. Development of successful entrepreneurship which facilitates innovation and growth is however a great challenge. Major goal of entrepreneurship in current times is to develop successful systems that provide supports to innovative solution of effective allocation of resources that yields maximum output. For successful development entrepreneurial education plays a significant role. Entrepreneurial education develops entrepreneurial

intentions that accelerate characters and traits relevant to development of business and new ventures. Entrepreneurial education is very important for students to gain insights of market relevant information to develop business of their own choice. It is based on techniques and courses that enable students to develop entrepreneurial capacity and entrepreneurial attitude essential for the successful entrepreneurial career development. Entrepreneurial intentions developed by entrepreneurial education are essential for the development of future in business. Entrepreneurs with entrepreneurial education have highly developed attitudes and capacities to deal with the situation as compared to individuals with no such background. Education in entrepreneurship helps individual to develop self-efficacy, subjective norms and achievements for successful businesses. Entrepreneurial attitude and entrepreneurial capacity provide individual with unique set of instincts, inspiration and vision that enables them to develop ability, strength and willingness to implement business plan effectively and to conceptualize ideas by seeking opportunities to create new ventures. Through education and training activities, practical skills for entrepreneurship can be provided that not only help in successful development of businesses but also enhance personality traits that are relevant to development of entrepreneurial attitudes and entrepreneurial capacities. Personality traits also hold significant importance in development of entrepreneurial skills that provide basis for development and implementation of innovative business ideas. Personality traits such as risk-taking behavior, need for achievement and self-confidence gives entrepreneurs enthusiasm and motivation to involve in ideas which are not commonly proceeded due to their high vulnerability factors. These behaviors bring in major innovations and promote growth. Entrepreneurial development thus has high dependency on personality traits of entrepreneurs.

5.3 Recommendations

Successful development of entrepreneurial career depends on entrepreneurial education which truly guides entrepreneurial career. Education associated with development of entrepreneurial career should be promoted by business institutes so that individuals can successfully transform their ideas into real ventures. Entrepreneurial education provides enough resources to an individual to gain entrepreneurial capacity that is essential for

successful business. Capacity building is an essential element for the successful entrepreneurship as it allows an individual to have operational, managerial, financial management and personal traits building capacity which are essential to develop viable business plans. It is associated with demonstration of strong personality traits that enables entrepreneurs to manage operations and systems in well-organized way. Investment in personality traits for successful entrepreneurship is also essential that must be considered by business institutes to work on the cognitive and psychological up building of students so that they can perform well in markets and successfully implement their skills with complete trust. Personality traits provide individuals with motivation, passion, optimism and creativity which give new dimensions for the development of business ventures. Successful entrepreneurs understand and suggest that decision making under several circumstance require highly personally developed traits for which they must be determined. For the successful functioning of venture capitalist, incubation center plays a vital role. Provision of useful incubation center to students with innovative and attractive business ideas accelerates the probability of success of business plan. Business incubators help in determining business potential by calculating the market potential of venture and ability of entrepreneurs. Conducive environment for the development of new business is provided by incubation centers which aid in launching enterprise in minimum cost. Development of incubators for the support of business is essential as it provides essential resources and necessary networking for scaling and starting a viable initiative. Business incubation centers provide support that is essential for development of business.

5.4 Future Directions

Entrepreneurship should be developed well enough for the sustainable growth and development of economy. Entrepreneurship is the dynamic capability to create incremental gain by acting innovatively. Development of entrepreneurship ensures innovations in society that adds value in wealth creation and improve living standards of society. New ventures developed due to the promotion of entrepreneurial development allow generation of new wealth in the economy. It also creates increased employment opportunities in society so therefore public and private resources should be allocated for the entrepreneurship development. The development of entrepreneurship education in a

society and entrepreneurial development of business incubators is essential as it plays a great role in motivation of new ventures. For the accurate advisory and support services business incubators development is essential to support business ideas. They enable new business ventures to survive on their own by provision of accurate direction for future prosperity to them. Entrepreneurial capacity and entrepreneurial attitudes must be fueled up by the education provided in business centers and business schools to enable individuals to act wisely and take smart decisions in market. Significant cognitive and behavioral development assistance should be provided to entrepreneurs to develop personality traits that enable them to take wise decision and act in best possible way. Personality traits are closely related to effective management of situations that enable individuals to take maximum advantage of the opportunities and to act wisely in decisive situations.

5.5 Limitations

This research study is not without limitations and needs these limitations to be acknowledged. Firstly, this research undertakes technological sector specifically targeting incubation centers. The scope of the study can include other target areas like small businesses, social entrepreneurs, manufacturing entrepreneurial businesses, service entrepreneurial businesses etc. in order to get broad range of responses. Secondly, the research context is limited to Islamabad and Rawalpindi based incubation centers due to inadequate resources. However, future studies can extend to other cities of Pakistan to get more significant results. The undergoing research considers four independent variables i.e. entrepreneurship education, risk taking factor, self-confidence and need for achievement, one dependent variable i.e. entrepreneurial capacity and one mediator i.e. entrepreneurial attitude. Impact of other independent variables, for example, other personality traits such as self-awareness, communicative, resilient and self-motivated can be observed so that idea about other important factors of entrepreneurship can be obtained.

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APPENDIX

QUESTIONNAIRE

Gender -----

Education -----

Income-----

Marital Status -----

Statement					
Entrepreneurial 1 (Strongly Disagree) to 5 (Strongly Agree)					
1.	Start a firm and keep it working is easy for me				
2.	I am prepared to run a viable firm/company				
3.	I have controlled the creation process of a new business/entrepreneurial venture				
4.	I know the necessary practical details to start a firm/company				
Entrepreneurial Education 1 (Strongly Disagree) to 5 (Strongly Agree)					
5.	I have enough knowledge about the entrepreneurial environment				
6.	I have greater recognition of the entrepreneur's figure				
Entrepreneurial Attitude 1 (Strongly Disagree) to 5 (Strongly Agree)					

7.	I am mentally mature to start my own business					
8.	I have good social relation with others to be an entrepreneur.					
9.	If I am involved in any business project, I believe I can perform very well.					
10.	When I deal with successful businessperson, I am being inspired to start business.					
11.	I shall feel uncomfortable if I am not sure of the goal of my future business.					
Need for Achievement 1 (Strongly Disagree) to 5 (Strongly Agree)						
12.	I excel in what I do					
13.	I work too much					
14.	I continue until everything is perfect					
15.	I work hard					
16.	I do more than what is expected of me					
17.	I plunge into tasks with all my heart					
18.	I do just enough work to get by					
Risk Taking Attitude 1 (Strongly Disagree) to 5 (Strongly Agree)						
19.	I like to explore strange places					
20.	I prefer friends who are exciting and unpredictable					
21.	I like to do frightening things					
22.	I like to try adventure activities					
23.	I like new and exciting experience					
24.	I like wild parties					
Self-Confidence 1 (Strongly Disagree) to 5 (Strongly Agree)						
25.	I feel confident that I can succeed in any business activities					
26.	I have always worked hard in order to be among the best in my field					
27.	I create the business opportunities I take advantage of.					
28.	I spend a lot of time planning my business activities					
29.	My knack for dealing with people has enabled me to create many of my business opportunities					

