

# **ENTREPRENEURIAL READINESS AT HIGHER EDUCATION LEVEL: A GENDER-BASED COMPARATIVE STUDY**

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**NATIONAL UNIVERSITY OF MODERN LANGUAGES  
ISLAMABAD**

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# **ENTREPRENEURIAL READINESS AT HIGHER EDUCATION LEVEL: A GENDER-BASED COMPARATIVE STUDY**

By  
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To  
Department of Educational Sciences  
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NATIONAL UNIVERSITY OF MODERN LANGUAGES

FACULTY OF SOCIAL SCIENCES

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Candidate of Master of Philosophy at the National University of Modern Languages do hereby declare that the thesis “**Entrepreneurial Readiness at Higher Education Level: A Gender-Based Comparative Study**” submitted by me in partial fulfillment of my MPhil degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in the future, be submitted by me for obtaining any other degree from this or any other university or institution.

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**Ghufran Khan**

## **DEDICATION**

Dedicated to

My loving Parents

Habib Khan & Jahan Tara

Without whom I would have been nothing

## ABSTRACT

**Thesis Title: Entrepreneurial Readiness at Higher Education Level: A Gender-based Comparative study**

This present study aimed to compare students' entrepreneurial readiness in public sector universities. The study's objectives were to assess students' entrepreneurial readiness at higher education, to compare students' entrepreneurial readiness on gender base, and to compare students' entrepreneurial readiness based on faculty at higher education level. The theoretical framework of the study was based on entrepreneurial readiness given by Adeniyi, Derera, and Gamede (2023). The model was based on five variables such as entrepreneurial readiness, searching, planning, marshaling, and implementing. For the current study quantitative approach and descriptive comparison design was used. The population of the study was (6661) male (4130) and female (2531) students at public sector universities of Malakand division. A stratified random sampling technique was used to select the sample. The sample size of the study was n=361 male (224) and female (137). The rate of return was 90 percent of the total sample. The research instrument entrepreneurial readiness was adapted which consisted of five variables entrepreneurial readiness, searching, planning, marshaling, and implementing. The data were analyzed with the help of SPSS edition 22nd, applying Mean and t-test. The results showed that students agreed with entrepreneurial readiness. furthermore, it was found that there was a significant difference between male and female entrepreneurial readiness. Furthermore, it was found that there was no significant difference between social science and management science student's entrepreneurial readiness. It is recommended that university administrations may introduce idea base exhibitions, and debates for students to enhance their entrepreneurial readiness skills such as marshaling and entrepreneurial readiness. Furthermore, the universities may conduct mentorship sessions with potential investors and business specialists through business incubation centers to provide awareness about entrepreneurial readiness to all students specially to female students.

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## **LIST OF ABBREVIATION**

Abbreviation	Term
STEM	Science technology engineering and mathematics
SMEs	Small medium enterprises
NSE	National systems of entrepreneurship
SCT	Social cognitive theory
TPB	Theory of planned behavior
SPSS	Statistical package for social sciences
SD	Strongly disagree
D	Disagree
UD	Undecided
A	Agree
SA	Strongly agree

## **LIST OF APPENDIXES**

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# **CHAPTER 1**

## **INTRODUCTION**

Entrepreneurship has been an emerging trend in the last two decades. There is growing discussion on entrepreneurship, which can be vital in obtaining sustainable economic and social development goals, including creativity, self-employment, and justice. Entrepreneurship can affect the economy formally and informally by increasing assets. Entrepreneurship in turn, leads to economic development through high-growth small and medium businesses. Small businesses can play a vital role as sources of income and employment for vulnerable people. The role of mindset and skills enables individuals to become entrepreneurs and capitalize on and seek any entrepreneurial opportunities. Numerous of these mindsets, types of knowledge, and skills can be enhanced in educational institutions and training programs within the broader discussions about entrepreneurship promotion (Valerio et al., 2014).

In this global era, the issue is not only to make human resources who are willing to be job holders, but they may also be capable of creating more new job opportunities. Currently, the available jobs are limited and incapable of maintaining pace according to the growth rate of the population. The proper channel to deal with the unavailability of jobs is entrepreneurship. Entrepreneurship creates more job opportunities and makes individuals self-employed to generate more revenue than a career as a job holder. Entrepreneurship is the proponent element that is geared toward the advancement of the economy. Entrepreneurship gives people the freedom to do work and makes them independent.

Entrepreneurship is a vital need of the current education system, which will make learners acquainted with social skills and teamwork, manage resources in their lives, and initiate new ventures in the future (Mani, 2017). Countries across the globe are suffering from unemployment and wondering how to cope with it. Entrepreneurship is considered a vital alternative (Badri & Hachicha, 2019). Entrepreneurship is like a vehicle for providing more employment opportunities and increasing the skills of the people in the economy to foster economic growth.

Educational bodies and policymakers consider the importance of imparting entrepreneurial education to learners to encourage the enhancement of entrepreneurial abilities and skills among them. Therefore, in recent years, there has been discussion of educational programs considering entrepreneurship across the globe. Educational bodies are now considering focusing on introducing courses related to entrepreneurship to motivate learners to consider entrepreneurship as a career option and to boost their interest in entrepreneurship (Wardana et al., 2020).

Entrepreneurs are considered to constitute the foundation of industries; they come up with novel thoughts about the venture, having a huge influence on socioeconomic development. Therefore, there are thousands of graduate students annually; some of them are willing to begin their ventures, and they are all considering having paid jobs. This trend turns out to be a disturbing reality for them. Entrepreneurship encourages them to consider choosing a self-employment career option instead of searching for wage-based employment (Israr & Saleem, 2018).

Considering the factors that affect entrepreneurship can spark policymakers and governments to make better decisions to boost their economies and become more self-dependent. They can achieve this by creating strategies to remove or mitigate the factors that prevent entrepreneurs from realizing the essence of entrepreneurship (Al-Mamary et al., 2020).

Entrepreneurship is considered a main driving force in the economic growth of societies and human well-being. Making and sustaining a proper entrepreneurial environment challenges the building of economies across the globe and compels these countries to come up with policies and strategies that support high-quality entrepreneurship. Every person in society succeeds or fails according to his or her efforts and abilities in an economically supportive society. Supporting institutions boosts their capabilities (Miller, 2019). Individual efforts to become economically stable are on track with a significant entrepreneurial attitude.

Economic freedom not only on-tracks individual efforts to beneficial entrepreneurial actions; in addition, it also affects the extent to which individual socio-cognitive capital is considered to be utilized and leads to high economic growth and entrepreneurship (Boudreaux, 2019). Further, Miller (2019) suggested that democratic progress and human growth are vital contributors to economic freedom. Investment in human capital leads to increased economic freedom because there is a strong relationship between them. Hindle et al., (2009) also focused on the fact that entrepreneurial development is possible only through human capital. Because human beings can gain knowledge, skills, and self-efficacy and flourish in entrepreneurial behavior.

Worldwide, entrepreneurship is anticipated to play a vital role in striving for overall growth. This phenomenon draws on numerous developments linked to the academic world, social enterprises, and business incubators to strive for broad entrepreneurship, creativity, and sustainable growth. A flourishing entrepreneurial environment that includes business incubation is a fundamental means for promoting economic growth. Business growth centers are considered facilitators for social enclosure and overall growth. There is a discussion going on to focus on how society can gain benefits from research activities and how they promote students and social entrepreneurship at large. Social entrepreneurship is the main contributor to gross domestic product, employment, and environmental and social impact on society. Social entrepreneurship has obtained considerable mainstream activity across the globe (Baskaran & Chandran, 2019).

For the overall development of the mind, body, and soul knowledge from various accessible and authentic sources is vital, and education is considered like an engine of the vehicle that accelerates the progress and growth of society. Education not only encompasses knowledge and developing skills, but it can also cultivate values and attitudes. Education is also accountable for raising human resources, exaggerating and stimulating financial growth, and improving technology (Ajzen & Madden, 2015). For the support of the country's economy, entrepreneurship, or self-employment, is considered a vital alternative by economists. Entrepreneurship acts as an engine for the economic growth of the country; entrepreneurs provide more job opportunities and manipulate adjustments in the social order (Ajzen & Fishbein, 2014). Self-employment and entrepreneurship are considered helpful sources for value creation and can also enhance output not only in our country but also across the globe.

Entrepreneurship is a rising global trend to foster the socio-economic growth of a nation. Entrepreneurship education has gained popularity in the last two decades (Fauziah et al., 2021). Entrepreneurial attitudes refer to profit and favorability and individual observations of entrepreneurship that affected their beliefs or thoughts toward new venture creation.

Entrepreneurial readiness can play a vital role in producing more entrepreneurs in society. Possessing entrepreneurial readiness, an individual can initiate action by keeping in mind prospect risk. Several skills and a collection of attitudes that are necessary in any given environment are considered entrepreneurial readiness (Pratomo et al., 2018). Therefore, entrepreneurs may utilize their capabilities to stay motivated and require self-support (Olugbola, 2017). Based on this explanation, it may be concluded that to shape entrepreneurial readiness, motivation, the ability to recognize opportunity, resources, and entrepreneurial capability are considered significant.

To foster entrepreneurial readiness, one must investigate the school environment in terms of recognizing and shifting possibilities in real and meaningful activities. Educational institutes have to focus on developing and nurturing students' entrepreneurial readiness while they are still learning.

## **1.1 Rationale of the study**

Entrepreneurship has a direct connection with the social and economic growth of a country. That's why the focus on entrepreneurship is rapidly increasing. Entrepreneurship significance has been identified by the Higher Education Commission to spread awareness about entrepreneurship and develop professionalism among students to upgrade their living

standards. In the past decade, the role of government has been negative rather than positive. Since the establishment of the University Grants Commission in 1972 and the restructuring of HEC, there has been no proper policy to introduce entrepreneurship education. Lack of funds remained the major constraint in the way to enhance entrepreneurship education. There was no properly trained staff, and no one bothered to constitute a committee to recommend and develop a viable curriculum. Therefore, due to these barriers, entrepreneurship never flourished as it was supposed to in the Pakistani context (Ahmad, 2021).

Entrepreneurship education has continued to gain global attention due to its pivotal role in acquiring entrepreneurial skills for economic advancement. It indicates that personal entrepreneurial skills significantly influence students' entrepreneurial readiness (Adeniyi et al., 2023). University students' tendency to take risks and their intention to start businesses are highly influenced by entrepreneurial education and skills (Ogbari, 2023).

Society demands education should equip students with tools and the ability to direct and search for success in the upcoming future. Entrepreneurial education has the capabilities and potential to provide relevant curriculum and competencies to enhance students' resilience, innovation, independence, and the potential to recognize opportunities to live productive and rewarding lives in this changing and unpredictable environment. Entrepreneurship has been supported by government initiatives to address ongoing obstacles due to economic disturbances (Hardie et al., 2020).

To enhance entrepreneurial education, higher education can play a vital role in improving students' entrepreneurial orientation and enhancing learners' attitudes towards

entrepreneurship to play a vital role in contributing to economic development based on innovation and knowledge (Passaro et al., 2018).

Educational institutions need to consider curriculum to prepare graduates for upcoming challenges in this unstable era where entrepreneurial skills are becoming more demanding in this decade. Numerous higher educational institutions shift their curricula to remaster study programs or conduct projects that consist of learners, academic staff, and business representatives to build collaboration among industry and educational institutions (Vavilov & Manning, 2018).

This study focused on learners' readiness towards entrepreneurship and compared students' entrepreneurial readiness in the Pakistani context at the higher education level. The position of entrepreneurial education in Pakistan is not yet popular; people are not in favor of and are not hopeful about entrepreneurship. Students are not familiar with this concept of entrepreneurial education. About ten to fifteen years ago, the Higher Education Commission of Pakistan recognized the importance of entrepreneurial education at a higher level of education. It was considered that it would deal with the fluctuating and ongoing demands of international movement and trends. But still, in Pakistan, entrepreneurship is limited to one or two subjects at the undergraduate or post-graduate level (Ahmad, 2021).

## **1.2 Statement of the study**

Entrepreneurship is becoming an emerging trend across the globe. In Pakistan being a developing country entrepreneurship is on its way to gaining popularity. It is worth discussing to familiarize students with the significance of entrepreneurship to support themselves and the nation's economy. Therefore, the researcher was interested in

conducting this research study to compare student's entrepreneurial readiness at higher education level.

### **1.3 Research objectives**

These objectives were designed for this study:

1. To assess student's entrepreneurial readiness at higher education level
2. To compare students' entrepreneurial readiness on gender base at higher education level
  - 2a. To compare students' searching on gender base at higher education level
  - 2b. To compare students' planning on gender base at higher education level
  - 2c. To compare students' marshalling on gender base at higher education level
  - 2d. To compare students' implementing on gender base at higher education level
3. To compare students' entrepreneurial readiness based on faculty at higher education

### **1.4 Null hypotheses**

The following hypothesis were formulated for this study.

H<sub>01</sub>: There is no statistically significant difference among students on gender base towards entrepreneurial readiness at higher education level.

H<sub>01a</sub>: There is no statistically significant difference among students on gender base towards searching at higher education level.

H<sub>01b</sub>: There is no statistically significant difference among students on gender base towards planning at higher education level.



H<sub>01c</sub>: There is no statistically significant difference among students on gender base towards marshaling at higher education level.

H<sub>01d</sub>: There is no statistically significant difference among students on gender base towards implementing at higher education level.

H<sub>02</sub>: There is no statistically significant difference among students based on faculty toward entrepreneurial readiness at higher education level.

## 1.5 Theoretical framework

Entrepreneurial readiness indicates a person's capability or willingness to initiate entrepreneurial action. This current study adopted Adeniyi, Derera, and Gamede (2023) four variables of entrepreneurial readiness. This model is significant for this current study because it points out more significant features of entrepreneurial readiness. These four variables are helpful to assess entrepreneurial readiness in terms of the searching, which considers how entrepreneurs recognize market opportunity, or how entrepreneurs look at unique ideas, the planning, which indicates how to design a unique idea for a business plan or business proposal, the marshaling, which describes how entrepreneurs will raise funds to initiate a business, or how entrepreneurs persuade more individuals to invest in their business idea and to become business partners, and the association of entrepreneurs with suppliers and customers. Implementing refers to successfully organizing, managing, and flourishing the business. The objective would be to determine how searching, planning, marshaling, and implementing encourage the entrepreneurial readiness of students.

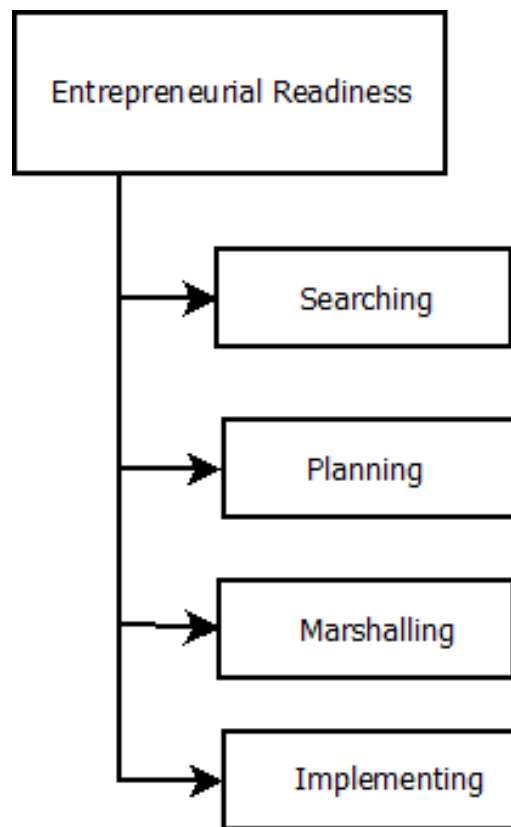
**Entrepreneurial readiness:** Entrepreneurial readiness refers to a person's intellectual qualities of ability and readiness to initiate entrepreneurial actions such as searching, planning, marshaling, and implementing.

**Searching:** It refers to how entrepreneurs recognize market opportunities, or how entrepreneurs come up with unique business ideas.

**Planning:** It refers to how to design a unique idea for a business plan or business proposal

**Marshaling:** It refers to how entrepreneurs raise funds to initiate a business, or how entrepreneurs persuade other individuals to invest in their business idea and become business partners, and associate entrepreneurs with suppliers and customers

**Implementing:** It refers to successfully organizing, managing, and flourishing the business.



*Fig 1: Entrepreneurial Readiness Phases Model*

Source: Adeniyi, Derera, and Gamede (2023)

## **1.6 Significance of the study**

This study would be helpful for policymakers. It would inform the authorities about the significance of entrepreneurial education. This study would address the main deficit in the field of entrepreneurship in Pakistan. Furthermore, this will help policymakers explore strategies to improve entrepreneurship education in Pakistan.

This study would also be beneficial for curriculum designers. They would integrate an entrepreneurial attitude into the curriculum. They would design innovative strategies to boost student's entrepreneurial attitude through proper channels.

The findings of this study would be helpful for students. As they would utilize it in their daily routine to become an independent individual.

Furthermore, this study would be beneficial for society. Society would benefit from innovative entrepreneurs providing products or services to society.

## **1.6 Methodology**

### **1.6.1 Research Approach**

The aim of this study was to compare students' entrepreneurial readiness at the higher education level. Considering the purpose of the study, the researcher adopted a quantitative research approach. In the quantitative research approach, data are collected in the form of numerical data from large groups.

### **1.6.2 Research design**

The research design is determined by the objectives of the study. Keeping in view the objectives of this study, the research design used by the researcher in the present study was a descriptive comparison. Social sciences and management sciences students' entrepreneurial readiness was compared on a gender basis at higher education level. The data was collected in numerical form.

### **1.6.3 Population**

The population of this study comprised male and female students enrolled in the social science and management science faculty of public sector universities located in the Malakand division. There are approximately 6661, where there are 430 males and females are 2531 students enrolled in social sciences and management sciences departments at public sector universities located in Malakand division.

### **1.6.4 Sampling technique**

Considering the nature of this study's large population, the researcher adopted a stratified sampling technique for data collection for this study. The researcher divided the population into two strata. The population of this study consisted of two major groups (male & female). The foremost objective of the stratified sampling technique was to give an equal share to each stratum.

### **1.6.5 Sample size**

The sample was the social sciences and management sciences faculty of Malakand division universities. According to Morgan's table, if the population is beyond 6000, then 361 will be the perfect sample size. Keeping in view this point, the researcher selected 361 students as a sample of this study. Each stratum consisted of an equal number of students.

Table 1.1

*Sample size of students from the Malakand division*

Sr. No.	Stratum	N	Rate of return
1.	Male	224	199
2.	Female	137	128
3.	Total	361	327

#### **1.6.6 Instrument of the study**

Data for the study was collected through a questionnaire. The research instrument on entrepreneurial readiness was adapted from Adeniyi, Derera, and Gamede (2022) and comprised five variables: entrepreneurial readiness, searching, planning, marshaling, and implementing. The researcher arranged items according to the theoretical framework of this study. Further, the research instrument questionnaire was divided into two major parts. The first part consisted of demographic information and the second part consisted of items that represent theoretical framework. The questionnaire was based on a five-point Likert scale.

#### **1.6.7 Data collection**

Data was collected through a questionnaire. The researcher personally visited all universities to approach respondents individually. The questionnaire was given to each respondent and each respondent was requested to fill out a questionnaire to obtain desired data for this study.

### 1.6.8 Data analysis

The data was analyzed through applying the statistical tests (Mean and t-test) for data analysis to obtain the desired results.

### 1.7 Delimitation

The delimitation of the study was:

1. All public sector universities located in Malakand Division.
2. Students of homogeneous departments of Faculty of Social Sciences and the Faculty of Management Sciences.
3. All undergraduate students were included in this study.

### 1.8 Operational definition

**Entrepreneurial Readiness:** Entrepreneurial readiness is an individual's intellectual qualities and readiness to engage in entrepreneurial activities, encompassing the abilities to identify opportunities, plan strategically, mobilize resources, and execute business initiatives effectively.

**Searching:** Searching in the entrepreneurial context refers to the process by which entrepreneurs identify and recognize market opportunities or develop unique business ideas. This involves scanning the environment, gathering information, and using creativity and strategic thinking to uncover potential ventures that can address unmet needs or create new value in the marketplace.

**Planning:** The process of designing a unique and comprehensive business plan or proposal, involving strategic thinking, detailed analysis, and innovative approaches to outline the objectives, strategies, and actions necessary to achieve entrepreneurial success.

**Marshaling:** The process by which entrepreneurs secure funding to initiate a business, persuade individuals to invest and become business partners, and establish connections with suppliers and customers. This involves strategic negotiation, effective communication, and relationship-building to gather the necessary resources for entrepreneurial success.

**Implementing:** The process of successfully organizing, managing, and growing a business, involving the execution of strategic plans, efficient resource management, and continuous improvement to achieve business goals and ensure sustainable growth.

## **CHAPTER 2**

### **REVIEW OF RELATED LITERATURE**

In the age of globalization, the progress of information technology and science has geared toward progressively tougher competitiveness in terms of physical and human resources; therefore, humans need to enhance their abilities. In addition, the growing population rate worldwide has given birth to many problems, such as the unavailability of jobs, which has shattered economic conditions. This also provides a basis for competition among employees. People are seeking job opportunities, but they do not get proper opportunities to work, and this has resulted in an increase in the number of unemployed. Employment and unemployment remain problems, and we need to hold more advanced citizens in the future.

#### **2.1 Entrepreneurship**

Numerous definitions address various characteristics of entrepreneurship, highlighting the well-being of both practitioners and academics for this problem. Entrepreneurship is defined as the route to come up with something novel of worth by offering the essential efforts and time, keeping in mind social, psychical, and financial risks, and gaining the desired outcomes (Hisrich et al., 2017). Entrepreneurship can boost individual independence in various forms, such as thinking, problem-solving skills, and seeking opportunities that occur in the surrounding environment. Entrepreneurship is considered an awareness, not a problem, and it helps create opportunities and gain economic prosperity (Humsona & Yuliani, 2018).

Entrepreneurship is a multi-dimensional trend. In other words, the definition of an entrepreneur might be “a person who initiates or manages a venture for growth and profit”



(Smith et al., 2020). Entrepreneurship is more worthwhile than just starting a new venture. Establishing an entrepreneur's attitude and beliefs among learners through appropriate entrepreneurship education is the demand of this fast-growing world. The 21st century has been focused on entrepreneurial education that can shape student career decisions because it is considered an influential factor of this century (Wei Xingjian et al., 2019).

Regardless of the various definitions that exist in the literature, entrepreneurship typically refers to an individual's capability to visualize novel ideas into a feasible innovative venture. Due to this, entrepreneurship is considered a key component of economic growth and has a positive influence on society (Badri & Hachicha, 2019). Entrepreneurship being a field of study has many aspects because of its practicality in society, and it makes it more problematic to achieve a whole understanding of its vital factors. In numerous cases of entrepreneurship, it is considered to create values that have a positive influence on society (Ratten & Jones, 2021).

Entrepreneurship possesses different meanings according to the situation. For numerous reasons, it is linked to the creation of small enterprises. Based on this, it has altered accordingly to the realization that there is plenty to entrepreneurship. Entrepreneurship and its products have changed the direction of different aspects of society and all ventures because they address creativity, novelty, affordability, efficiency, revenue generation, and job opportunity creation (Fu et al., 2019). The outcome of things has considerably changed due to technological innovation in the last decade (Ratten, 2019).

The growing significance of entrepreneurship in economies in the twenty-first century is a genuineness that is perceived vividly. Innovative entrepreneurship has increased and gained the attention of practice and research (Crudu, 2019). Innovative

entrepreneurship, which leads to an emphasis on venture models and novel products, is considered the main source of high growth for businesses raises the whole revenue of society and creates numerous jobs for the economy (Acs et al., 2016). Giving more significance to innovative entrepreneurship for national richness, and economic development, public and government agencies have felt the significance of giving the required set-up to back and inspire this innovative entrepreneurship (Acs et al., 2016).

In the beginning, numerous people perceived entrepreneurship as the consequence of individual work rather than collective work. It was because of the myth of the hero entrepreneur who took a risk and won the battle. Entrepreneurs were considered solo business owners who began their venture rather than developing it based on their ideas. This refers to mounting their venture from small enterprises in the local environment to the international level. In the last decade, the increasing numbers of entrepreneurs considered the creation of ventures through a factory or store, then slowly enlightening other entities. The arrival of the internet and electronic market commerce makes it easier to sell products to other markets. But still, numerous sole proprietor-managers are on their venture (Ratten, 2019).

The word entrepreneurship may be used at various levels of exploration. At different levels, it is considered in what way individuals turn into entrepreneurs. This emphasized individual features and what environmental or genetic reasons affect entrepreneurial action. The research on individual entrepreneurs has mainly addressed developed country entrepreneurs, but now most researchers emphasize evolving and rising country entrepreneurs. At the social level of entrepreneurship, it focused on social changes initiated through novel ventures. It mainly laid emphasis on sustainability and

environmental phenomena; entrepreneurship is considered the driving force to address societal effects. It emphasizes profit activity and nonprofit activity. At the firm level of entrepreneurship, it mainly laid emphasis on studying enterprise behavior (Ratten, 2019).

Entrepreneurship encompasses the readiness and ability to establish and grow a novel venture, considering all economic threats to generate more revenue. In the current decade, entrepreneurship is considered a significant factor for individual and government officials due to it is considered a vital source of job creation and economic growth in this globalized world (Saiz-Alvares, 2021). Entrepreneurship is of huge importance globally because it speeds up commercial development in emerging and advanced countries. A state may generate more revenues from entrepreneurial activities. Entrepreneurship requires identifying a prospect in the surroundings and availing the required resources to proceed with the prospect for long-term achievement for economic and development advantages. Consequently, for entrepreneurship, an opportunity needs to be recognized in the surrounding market, and entrepreneurs utilize the essential resources for the utilization of the opportunity (Saiz-Alvarez, 2021). The achievement of entrepreneurship may be seen by economic and financial growth gained.

Entrepreneurship means having the ability to maintain economic growth. However, government officials need to plan to maintain a workable situation between entrepreneurs. The more individuals establish entrepreneurial thinking, the more financial growth in the state will increase. The discussion about entrepreneurial values within the nation has been established among the advanced countries. Suchek et al., (2022) identified that entrepreneurship can boost economic growth and certified that infrastructure is changing. Regrettably, this trend is different in emerging countries; an opposing macro-environment

and set-up add to on-track entrepreneurship fruitless and unsupportive economic development.

Establishing a venture is considered a driving force for economic growth, generating more revenue, and ways to build cities' development and affordability. Due to these motives, the creation of ventures and entrepreneurship turned into a fruitful debate topic for growing economies and gained more popularity in research areas in this decade (Alferaih, 2017). Due to this significance, it also provides help to facilitate educational programs, informal and formal, and financial sponsorship to inspire venture creation and entrepreneurship through government officials, higher educational institutions private and public organizations (Onjewu et al., 2021).

Entrepreneurship is considered a productive way to reduce the unemployment rate globally. To do this, motivation became a vital way for educational graduates to take an interest in and be passionate about entrepreneurship (Nastiti et al., 2019). Due to this condition, a solid solution is required to cope with this problem. Where individual students and society members need to be capable of thinking creatively to turn into entrepreneurs, schools can play a vital role in that, where schools' effort to spread awareness among students about entrepreneurship is the way to cope with and face obstacles in the future. This focus on that school can be utilized as a medium to facilitate students becoming entrepreneurs through education at school after they graduate later (Suratno et al., 2023).

Existing job opportunities are becoming limited, but the labor force that needs a job is getting worse. More competition and the effort of getting a job are obstacles for the educational world, especially in the case of vocational education. Vocational education is directly associated with individual preparation for developing the needed career, adding to

undergraduate education or equivalent vocational education (Yeni & Hartanto, 2018). It laid emphasis on education to produce graduates who may be skilled and accepted by companies to work with, both private and national, rather than graduates who can have established jobs (Amelia & Sulistyowatie, 2022).

Entrepreneurial activity is considered significant for a country's economic condition because it may overcome the unemployment rate in a state. The role of entrepreneurs and the level of economic growth of a nation cannot be separated (Rodhiah & Nathasia, 2020). Globally, entrepreneurship in this decade has a significant role in the development and growth of the economy of the nation through the expansion of entrepreneurial activities, it will create more job opportunities. (Rodhiah & Wilson, 2021). This opportunity may be utilized to overcome the unemployment ratio in a country.

The significant role of entrepreneurship in striving to attain economic growth, create more jobs, increase competitiveness, and promote the prosperity of the nation has taken people's interest in the development of both venture creation and entrepreneurial education, and it is believed that it can enhance economic, organizational, and social growth (Singer et al., 2015). The establishment of new businesses is considered significant for improving the economies of the nation (Fayolle et al., 2016).

Growing entrepreneurial culture and entrepreneurial education can also accelerate economic development by encouraging small enterprises, identifying all the obstacles to flourishing entrepreneurial management at the local level, and recognizing development opportunities (Audretsch et al., 2016). Studies regarding venture creation and entrepreneurship create a general investigative framework to comprehend social-economic dynamics and establish them. In addition, entrepreneurial education enables learners to

think beyond their capabilities, enhancing the level of innovation, and to cope with contextual challenges, giving them sense, skills, and competencies that focus on socio-economic change (Kabir et al., 2017).

The progressively extreme race for jobs in this industrial world needed vocational high schools to enhance the capabilities of their graduates. In addition, these students can be able to enter the world of work instantly after taking their degrees. To be in a position instantly in the world of work, one needs work readiness, which consists of self-readiness both mentally and physically, which is considered the starting point for pursuing later achievement (Anggriawan et al., 2018).

The significance of entrepreneurship is hidden in the fact that it can enhance the economic well-being of societies, primarily with the help of establishing social values and economies. Therefore, the researchers focus on entrepreneurship as a significant element for creating jobs, competitiveness, and the development of nations, which allows for the identification of personal goals and achievements for societal purposes (Ovalles et al., 2018).

The opportunities in entrepreneurship and enterprise are considered vital in producing and accepting a huge amount of university and college graduates, later contributing to changes in societies, countries, and international economic growth (Gbato, 2017). Similarly, an international business atmosphere is characterized by a competitive and diverse setting. This requires innovation to be essential for living rather than a means of getting ahead of the opponents (Kim et al., 2020). Hence, a competitive business

environment and unemployment mount the need for universities and colleges to be considered innovation hubs (Comins & Kraemer-Mbula, 2016).

The momentum shifts from traditional to modern paradigms and has led to changes in human civilization, particularly focusing on the human perspective to identify how significant it is to protect the earth or how feasible it is to prevent actions that affect the environment and nature. Similarly, it touches on the mindset and behavior of business industries; they mainly focus on green products, which use waste materials to be managed efficiently and effectively. Upcoming business industries are not focusing on fine business; in the current day, social entrepreneurship is beginning to reshape the business industries and base these industries on a friendly environment and community social values (Schaltegger et al., 2016).

The concept of entrepreneurship is adaptable and can be used in various contexts. It is sometimes considered the concept of self-realization to refer to economic and financial independence with the making of things and services to get income as a reward. Salami (2011) considered entrepreneurship as the ability of a person to establish and recognize opportunities and turn these opportunities into novel ventures. Usually, entrepreneurship consists of launching novel products, novel ways to advance products, or novel ventures through mounting people and resources distinctively for more satisfaction.

Entrepreneurial knowledge is considered the acquaintance of how to establish values in accomplishing attainment in starting a venture through innovation, willingness to consider venture opportunities, courage to initiate risks, and trying to figure out what the essential factors of accomplishment are in succeeding attainment (Ritonga & Sianipar,

2016). Entrepreneurial knowledge is an essential element in the enhancement of entrepreneurial skills, as evident in actual knowledge that is considered to enhance awareness of entrepreneurship as a career choice and nurture students' awareness of entrepreneurship (Daniel et al., 2017).

Entrepreneurship is the essential attitude and essence of an individual who is innovative and creative and always finds ways to advance himself and the surrounding community. Therefore, it is important if entrepreneurship exists in everyone, including employees, teachers, learners, housewives, and so on, and it cannot be limited only to entrepreneurs (Wibowo, 2011). Though various other fields of study are also establishing entrepreneurs, they include industry, government officials, universities, and colleges. Entrepreneurial appearance is considered a person who seeks opportunities, gains these opportunities through his capabilities, and believes that attainment is waiting to be accomplished (Roxas, 2014).

Today's young generation focuses on getting a valuable job with a decent status and earning more money after completing their education and neglects to have an entrepreneurial idea. Spreading awareness to motivate learners to be entrepreneurs is considered essential to analyzing the obstacles that can affect learners' readiness and motivation to be future entrepreneurs. Numerous professionals have debated overcoming unemployment. Some think that considering a career as an entrepreneur is the opposite of a joyful life because they believe that being entrepreneurs entrepreneur requires hard work and facing more obstacles, which is why it is unpleasant. The employment number may be



overcome through the courage to create jobs or become a future entrepreneur (Ikhwan et al., 2020).

Giving more importance to the courage of entrepreneurship in the growth of the country, the university's role as an entrepreneurial incubator is considered significant. The universities are expected to build entrepreneurial spirit among students, establish the psychological behavior of entrepreneurship, enhance learners' skills, specifically the sense of venture, and establish a novel venture based on empirical knowledge.

## **2.2 Entrepreneurial readiness**

An entrepreneurial readiness could be described as the number of various individual qualities that distinguish individuals by their readiness towards entrepreneurship as specifically capable of searching and analyzing their surroundings in a manner where they organize their innovative and dynamic abilities; therefore, they can organize their efforts to challenge and condition for self-achievement (Coduras et al., 2016). This explanation highlighted that the entrepreneurial readiness of the young generation relies on their capabilities to discover numerous surrounding opportunities, use their entrepreneurial capabilities grounded in existing assets, and be essential for self-achievement.

Readiness is a position of being prepared to respond or react and various levels of growth from the maturity of prior experiences and a stable psychological position in doing something (Retnasari, 2020). Readiness consists of three aspects, such as: (1) emotional, mental, and physical; (2) motives, goals, and needs; and (3) knowledge, skills, and understanding that have been gained. Entrepreneurial readiness is the overall position of an individual that enables them to pursue entrepreneurship. Therefore, entrepreneurial

readiness is essential for individuals to create ventures (Utami & Denmar, 2010). Hence, entrepreneurial readiness is considered an individual entrepreneurial essence that will boost their abilities and develop new ventures.

Entrepreneurial readiness is the overall situation of a person that enables him to respond to an entrepreneurial activity (Yunita, 2020). Readiness is considered the level of growth of encouraging maturity or maturity to perform something. This understanding is the acquaintance, attitude, and skills possessed by a person relevant to his or her aims to be accomplished. Readiness is recognized as the willingness to respond to a phenomenon. This willingness was initiated by the inner selves of the students.

Entrepreneurial readiness is a person's capability and willingness to initiate entrepreneurial tasks; a set of attitudes and skills needed to start a venture in any circumstance; and a viewpoint, attitude, and belief are essential in enhancing the entrepreneurial numbers in society (Kumar et al., 2021). Consequently, entrepreneurial readiness can be considered a mental level of a person's readiness for upcoming entrepreneurship, and it can evaluate the surrounding entrepreneurial capability or a person's potential to analyze the external atmosphere.

The influential factor that inspires a person's readiness to begin a venture and initiate activities is competencies, which are the skills, knowledge, and experience required for entrepreneurial activities. Entrepreneurial competencies require the effort to achieve entrepreneurial activities accurately (Costa et al., 2016). A person who believes that they have a high level of entrepreneurial skills will be considered more accurate when creating a new business.

According to Anggriawan et al., (2018) entrepreneurial readiness is an individual's willingness and need to perform entrepreneurship. An individual's willingness and need depend on their level of understanding, prior experience, and psychological and emotional state. In the world of work, one ought to have provisions. These provisions consist of mental readiness, resource readiness, and knowledge readiness. Entrepreneurial readiness is the entrepreneurial behavior and skills that motivate an individual to be effective, productive, and innovative in meeting environmental demands (Nuryana et al., 2021). Entrepreneurial readiness is considered a business activity carried out by an individual or several others who have different needs and aim to benefit from business activities by benefiting from opportunities furnished through mental, physical, skills, emotional, and previous knowledge (Apiatun & Prajanti, 2019).

Entrepreneurial readiness is the set of skills and attitudes essential for any circumstance (Pratomo et al., 2018). Through entrepreneurial readiness, learners, as young individuals, are considered capable of recognizing numerous opportunities that initiate action with numerous risks in their upcoming lives. Therefore, considering this, it can be determined that to build entrepreneurial readiness, various factors could affect it, such as the ability to recognize opportunities, motivation, entrepreneurial abilities, and resources.

### **2.2.1 Motivation**

Entrepreneurial motivation, an element that drives an individual to carry out an activity to attain goals, is crucial in defining entrepreneurial readiness. High levels of entrepreneurial motivation will also have a significant influence on one's level of readiness. The results of this study are supported by prior research, which indicates that

entrepreneurial readiness is positively and significantly affected by motivation (Kallas, 2019). Similarly, a study indicates that high motivation, desire for satisfaction, and other factors like market conditions, the business atmosphere, technology, education, etc. all contribute to entrepreneurial readiness (Jahn & Geissler, 2016). The conclusion made about this research's findings is that an entrepreneur with strong motivation would develop the necessary entrepreneurial readiness in himself to initiate an act to accomplish the objective he wants to achieve.

A person's motivation is what drives them to engage in purposeful activities (Oktiani, 2017). A high level of motivation is essential for an entrepreneur since it fosters a strong sense of duty. It was stated that learners with greater levels of motivation are more likely to be prepared to launch their businesses than learners with lower levels of motivation to participate in actions or chores that carry a significant amount of personal obligation or results. Desire for success, independence, and financial gain are crucial drivers of entrepreneurial readiness in students (Choo & Wong, 2006). Furthermore, if an individual think that the business he is carrying out or has going on is significant for him, he will struggle for its accomplishment. Individual motivation towards entrepreneurship is to gain more revenue, get freedom at work, and make himself and his business independent (Olugbola, 2017).

Studies from the past have identified several elements of entrepreneurial motivation. One of the key elements promoting individuals' entrepreneurial aspirations is achievement motivation (Coduras et al., 2016). The expected results of entrepreneurship have an impact on new ventures. The tendency that motivates someone to want to establish

a business is knowledge of how to do so and the urge for success. There is currently little empirical data supporting motivation for accomplishment.

According to Barringer & Ireland (2015), the desire for independence is a major factor in beginning a new business. When someone expresses a desire for independence, they act on their own initiative rather than being compelled to action by outside forces. People who aspire to independence do so because they want to oversee their future. This remains the main reason why some empirical findings suggest that entrepreneurs' choices have little bearing on their desire for independence. Young people, according to Kew et al. (2013), are innately self-starters since many of them are passionate about their pursuit of freedom. As a motivation that might affect entrepreneurial readiness, this study advises that additional research on the desire for independence be done.

### **2.2.2 Opportunity recognition**

Trends outside of the work environment are considered business opportunities. These industry opportunities have the capacity to continuously create more revenue for the company if industry actors can take advantage of them (Kusmulyono, 2016). It will be simpler for someone with high sensitivity to spot market trends and recognize business opportunities. To assist in the development of entrepreneurial readiness and accomplish the goal of business success, it is essential to have the capacity to recognize opportunities. The findings of earlier research that found opportunity identification had a favorable and considerable impact on entrepreneurial readiness (Khin & Lim, 2018).

Entrepreneurial readiness is considerably affected by opportunity identification. These findings show a positive correlation between opportunity identification and

entrepreneurial readiness among Sukses Berkah Community (SBC) members. The ability to recognize opportunities is one of the essential qualities an entrepreneur must have to be successful in business. To locate and decide on anything that the market needs, opportunity identification is necessary. Before and during the operation of the firm, this process of identifying growth opportunities must be continuous (Short et al., 2010).

According to a study by Kirkley (2016), several factors might affect someone's willingness to start a new business, including market opportunity, competition, customer demand, and market conditions. According to the explanation given, it can be concluded from this research that an entrepreneur must identify and seek unexplored opportunities before beginning a firm for it to succeed and grow into an attractive business. It takes careful consideration to select the perfect business opportunity while seeking it.

According to Baron (2004) an opportunity is a potential way to create economic value that hasn't already been exploited or isn't being used by other young people. As a result, it is possible to think of opportunity identification as the cognitive process by which young people recognize opportunities they perceive to exist. Finding an opportunity is just the first step; the next is to assess it and turn it into a novel venture. Opportunity recognition is the process by which young people decide to start their own business even though they have the option of earning a living through work opportunities at the time they are making an allowance for it (Ellis & Williams, 2011).

According to prior research, students require a developed concept to benefit from market opportunities in an area. In terms of planning for the launch of new ventures, the recognition of opportunity has a beneficial and substantial consequence (Seun & Kalsom,

2015). Using a hierarchical regression model, Seun and Kalsom (2015) undertook research of a similar nature. The results showed that opportunity identification and planning for the launch of new ventures had a favorable and important link. According to earlier research, new venture opportunities become observable once an entrepreneur is prepared to launch a business (Barringer & Ireland, 2015) which lends weight to these findings. As it develops students' skills, entrepreneurship training increases and improves the number of entrepreneurial options available to them (Janice & Dmitriy, 2013).

Studies from the past have identified several different aspects of opportunity identification. The ability to recognize opportunities, which can impact readiness to initiate a business, is influenced by past knowledge, societal links, and greater intellectual capabilities (Mitchell et al., 2002). Inventive practices are the contextual knowledge, experience, and expertise that an entrepreneur brings to the procedure of identifying opportunities (Kao, 1989). In essence, it can take a person a hundred unique concepts to find the one that best fulfills a given opportunity (Barringer & Ireland, 2015). Most research on creativity and opportunity identification has been suggestive rather than scientific in nature.

### **2.2.3 Resources**

The contribution necessary for a company to conduct production activities is known as a business resource. For a product to compete in the market and enhance corporate success, resources are crucial to its development. The utilization of resources in the route of production, containing financial resources, intellectual resources, and physical resources, is essential to the success of any corporation. One of the aspects influencing a

company's performance is its capacity to manage its resources (Vidayatmoko & Rosadi, 2015).

Resources are "financial, physical, human, and organizational capital that allows a corporation to create, produce, and provide services or products to its customers.". According to Alvarez & Barney (2014) entrepreneurial resources are concrete and immaterial resources that businesses utilize to take advantage of market inefficiencies that affect competition. According to Wu (2007) an entrepreneur's resources also include his or her resources and skills. Resources are essential for becoming entrepreneurially ready. The study further showed that entrepreneurship teaching ensures the consequences of resources on the way to entrepreneurial readiness, using and validating the encouraging link between learner readiness and resources (Seun & Kalsom, 2015b).

Business development will be affected by a lack of available resources. So, the fundamental requirement for starting a business is resources, which frequently become a barrier. Resources have a favorable and considerable impact on entrepreneurial readiness, according to the findings of other research (Vuong et al., 2015) which support the findings of this study that business success is influenced by a company's resources. According to Huang's (2016) research in a similar vein, Frid's (2014) research demonstrates that a novel firm will be able to continue and grow its corporation if it has adequate capital. A conclusion drawn from this study is that capital is an important aspect that an individual ought to have in order to start a venture, as worthy resources are going to support him in creating a company and boosting business thoughts, which influence entrepreneurial readiness.



According to earlier studies, resources have a variety of components. The difficulty in obtaining physical resources (technology) in connection with the start-up of a fresh business has a greater effect on entrepreneurial readiness. Accessibility to physical resources comprising land, space, utilities, and communication networks at a reasonable cost has a favorable and important connection towards entrepreneurial readiness for a fresh venture creation (GEM, 2012). Licenses and the right of entry to property rights are important factors in encouraging entrepreneurial activities.

#### **2.2.4 Entrepreneurial ability**

Entrepreneurs will benefit from entrepreneurial abilities while formulating functioning strategies and adopting planned actions. Business accomplishment remains effected through the capability to design, produce budgets, establish promotion policies for desirable goods, react immediately to changing circumstances (ups and downs), retain connections with consumers, constantly advance the quality of products to gain a share of the market, and continue capable personnel (Agbim, 2013). Entrepreneurial skills are necessary before launching a firm. In order to build a successful firm, an entrepreneur must be innovative at all levels and skilled in employing all of his strengths, including practical skills, organization skills, entrepreneurial skills, and his skills (Chang & Rieple, 2013).

The findings of other research, which found an encouraging and critical association between entrepreneurial readiness and entrepreneurial skills (Acharya & Chandra, 2019), support the findings of this study. In a similar way, Chatterjee & Das (2016) demonstrate how entrepreneurial ability influences entrepreneurial accomplishment. According to the argument presented, it can be concluded from the study's findings that having

entrepreneurial skills is essential for starting a new firm. Planning failures and a lack of entrepreneurial skills are major causes of failure for entrepreneurs. One of the factors that contribute to a business's success is the owner's personal attitude, such as a strong internal ambition to act and use all of his capabilities to succeed.

According to Zahra (2011) entrepreneurial ability is an individual's ability to identify, decide, design, and manage inner and external situations for the purpose of exploring and manipulating opportunities. According to Seun and Kalsom (2015b) entrepreneurship training ensures a connection between entrepreneurial skills and readiness for the launch of new businesses. According to Souitaris et al., (2007) student participation in entrepreneurship programs has improved their overall entrepreneurial ability.

Previous research has looked at a number of components of entrepreneurial ability. In order to ensure effective administration while establishing a new business, entrepreneurial ability is essential. For every student hoping to establish a new business in the future, managerial and administrative skills are important. Additionally, the lack of an adequate business strategy contributes to the failure of many new businesses from the beginning (Barringer & Ireland, 2015). This demonstrates the need for a business strategy when starting a new firm. Students who receive entrepreneurship training can learn how to create an effective business plan and become one of the chosen few successful people who are considered when a startup seeks finance. Marketing function is another aspect of ability.

## **2.3 Difference between business, entrepreneurship and startup**

The terms start-up, entrepreneurship, and business are sometimes used interchangeably, however there are significant differences between these concepts. The process of launching, operating, and identifying new markets for a business is all associated with entrepreneurship. On the other hand, startups are a particular kind of company that prioritizes quick expansion and creativity, frequently using technology in the process. Any company that provides products or services to customers with the goal of generating a profit is considered a business (Akkir, 2023).

A startup is an emerging company founded with the goal of creating a novel good or service, introducing it to the market, and making it attractive to consumers. Disrupting existing markets or establishing new ones is the common goal of startups. High growth potential, creativity, and a significant focus on flexibility are usually what define businesses (Aayushi, 2024).

A business, on the other hand, is defined as any company engaged in business, trade, or profession with the primary purpose of making a profit. This phrase refers to a wide range of activities, from small local businesses to massive multinational corporations. Businesses, as opposed to startups, could emphasize stability and consistent profit creation over rapid expansion or innovation (Aayushi, 2024).

Entrepreneurship is the process of creating, starting, and managing a new company with the intention of turning a profit. In order to match goods and services with a target market and maximize return on investment, entrepreneurs must take financial risks.

Entrepreneurs must develop their own ideas and specify their desired results, in contrast to businesses that follow pre-established models or have predetermined aims (Staff, 2023).

## **2.4 Difference between entrepreneurial Readiness and desire**

Entrepreneurial readiness has been considered an individual's ability or tendency to explore entrepreneurial opportunities. An individual's intellectual capabilities of competence and willingness to guide carry out in an entrepreneurial setting are known as entrepreneurial readiness. Similarly, an individual's broad ability to respond to entrepreneurial activity is used to assess their level of entrepreneurial readiness (Darmasetiawan 2019). This means that a set of mental skills necessary for successful entrepreneurship is known as entrepreneurial readiness.

Entrepreneurial desire and feasibility play an important part in shaping individuals' intentions to pursue entrepreneurship. The perceived entrepreneurial desire typology indicates an individual's individual motivations for becoming an entrepreneur. According to the theory of planned behavior, individuals' perspective on the act is affected by their attitude, personal norms, and perceived behavioral control (Duong, 2022).

Entrepreneurial desire refers to a strong motivation or dedication for establishing a business, whereas entrepreneurial readiness refers to an individual's actual capability and willingness to take steps and successfully begin an enterprise, encompassing not only the desire but also the necessary skills, knowledge, and mindset to do so effectively; essentially, readiness is the ability to act on the desire to become an entrepreneur.

## **2.5 Types of entrepreneurship**

Entrepreneurship being a study field has various types because of its significant in social context, that marks it challenging to increase an overall comprehension of the situation essential aspects (Ratten, 2023). There are various types of entrepreneurship, this supports to give an insight of every single type of entrepreneurship contain and in what way it's different to other type of entrepreneurship (Ratten, 2016). Major types of entrepreneurship are:

### **2.5.1 Artisan entrepreneurship**

Artisan entrepreneurship consists of utilization of creative capability towards generates novel goods and facilities. Generally, it indicates some types of homemade or handicrafts that is unique in nature. Therefore, the artisan entrepreneurs ensure that each product is unique manner that's look different from other. For instance, artisan entrepreneurship consists of pottery makers, crafts brewers, and ornaments designing. Foundation of pyramid entrepreneurship laid emphasize proceeding creative ventures activities for individual existing on less pays. Occasionally it is considered as a survival entrepreneurship or need entrepreneurship due to individual ensuring utilizing of what they are having in order to generate wealth (Ratten, 2013).

### **2.5.2 Creative entrepreneurship**

Creative entrepreneurship is considered art and entertainment industry kind of creative venture activity. This laid emphasize on performing something very different and not performing exactly what recently exist in marketplace. Progressively creative entrepreneurs are encouraging invention in various sphere of the social order. Traditional entrepreneurship is resembling to creative entrepreneurship, but it laid emphasize on heritage and tradition. Under develop country entrepreneurship includes creative and risk-

taking ventures activities inside states which are rising nevertheless quiet at a low level of pay as compared to advanced nations (Ratten, 2023).

### **2.5.3 Digital entrepreneurship**

Digital entrepreneurship grown since the practice of digital tools in marketplace. Trendy current decade cell phone trade practice has enhanced because of physical and social separation after COVID-19 pandemic (Cimperman, 2023) during that period, vast digitalization ratio has made it simpler for fresh startup to developed. Digital entrepreneurship is referring to process of establishing of digital norms with the help of utilization of different socio-technical enablers to support attainment, processing, delivery, and feasting of digital material (Sahut et al., 2021). Entrepreneurship is shifting because of technology like huge data, analytics, social platforms, and overfunding changing venture practices. This is follow-on novel form of entrepreneurship like digital entrepreneurship rising that identifies novel manners of performing business. Digital entrepreneurs identify that current businesses are shifting through digital abilities (Gupta & Bamel, 2013).

### **2.5.4 Education entrepreneurship**

According to Liao et al., (2022) education entrepreneurship contains of examining venture actions relevant to acquisition of learning and distribution of knowledge. It is considered prevalent to the scope of entrepreneurship that associate observing after instruction with data gaining methods. Progressively there has been extra stress in the social order overall on entrepreneurship education because of its effect going on territorial and international growth levels (Mandrinos & Lim, 2023). Rising economy entrepreneurship targeting examining entrepreneurship in financial environment that

rising. Generally, this indicate that there is a variation in living social conditions, which is flagging the way for novel types of business to rise.

#### **2.5.5 Environmental entrepreneurship**

Environmental entrepreneurship stated towards creative venture action which are relevant to the surroundings. Though it may be linked with various kinds of entrepreneurship like scientific and sports conditional on the situation. Environmental entrepreneurship is parallel to sustainable entrepreneurship but it laid emphasize on directing venture actions which are having ecological advantageous. This considered that they are assisting to build a sphere improved place through focusing on the positive ways ventures can help the society (Ratten, 2023).

#### **2.5.7 Frugal entrepreneurship**

Frugal entrepreneurship contains thinking of creative venture models which are led utilizing rare available resources. Even so often this also mentioned as a “Jugaard” creativity in order to utilize resources at hand in the period of resource shortage. Gender entrepreneurship pointed out the technique gender can or cannot affect inventive business activity. This notion on the back of gender entrepreneurship is that biology in order to the way people live and behave affect business connections (Ratten, 2023).

#### **2.5.8 Technology entrepreneurship**

Technology entrepreneurship comprised of comprehending the ways internet and communication are utilizing inventively in a business environment. Generally, it comprised of targeting on evolving technologies like robots and artificial intelligence. Business financing targeting to comprehend method of crowdfunding and other inventory economic

business are using by entrepreneurs. Currently, technological invention like block chain can affect the direction of research relevant to business economic (Ratten, 2023).

## **2.6 Gender differences in academic entrepreneurship**

Academic entrepreneurship, or the process of highlighting research in a university with activities like licensing, patenting, and byproduct materialization, is rapidly suggested to be significant for both regional and national economic growth (Siegel & Wright, 2015). Even though various universities have initiated steps forward in academic entrepreneurship, executing extra actions to enhance commercialization activity continues to be a priority for both policymakers and institutions (Rasmussen & Wright, 2015).

It is observed that fewer females than males engage in various academic entrepreneurial activities, which indicates a lower representation of females in entrepreneurship, more specifically (Goel et al., 2015). For instance, females in academia are less likely than males to gain rights as primary inventors (Abreu & Grinevich, 2017) engage in partnerships with the private sector, or initiate startup businesses matching their research. Gender differences are present in opinions as well as in performance, though males report more confident beliefs compared to females in academic research commercialization (Miranda et al., 2017). Researchers who give more attention to this gap are considered to conduct research in this area (Poggesi et al., 2020).

Even though entrepreneurial education has been suggested as a road map to increase women's beliefs towards entrepreneurship and take part in it, the women's enrollment ratio is far lower than that of men in entrepreneurship programs (Thebaud, 2015). Given the importance and vesting investments being initiated in academic



entrepreneurship training, it is significant to comprehend experience to highlight challenges and possible improvements to involve more diverse participants.

Numerous studies have investigated women's participation in entrepreneurial activities; nevertheless, research like gender disparities in the area of academic entrepreneurship is partial (Poggesi et al., 2020). Accordingly, Wheadon & Duval-Couetil (2019) categorized challenges linked with gender barriers to entrepreneurship into a capital framework, which consists of human, cognitive, social, and financial capital in participation.

### **2.6.1 Human capital**

Human capital is considered resources characterized through skills and capabilities that are nurture with help of education, training, and various collected experiences like employment. A person who established businesses typically having previous experience in the relevant area (Millan et al., 2014), furthermore, a study found that academics are having positive beliefs regarding entrepreneurship if they are having past business experience (Miranda et al., 2017). As a result, gender variance in education and initial experience are considered an essential aspect towards gender difference in entrepreneurship engagement (Goel et al., 2015). For instance, a study found that women academic entrepreneurs were more probable than men to report a smaller number of human resources, knowledge, and collaboration with peers (Sinell et al., 2018).

### **2.6.2 Cognitive capital**

Cognitive capital is considered psychological resources far away from skills that affect task accomplishment, consist of motivation and confidence. In the field where females are in less number or experience negative stereotype, they are having less self-

efficacy as compared to men, even in a position where they exhibit high level of accomplishment or performance (Kay & Shipman, 2014). In entrepreneurship, females generally demonstrate less self-efficacy in comparison with male (Dempsey& Jennings, 2014). In addition, it causes low entrepreneurial intentions. For instance, a study revealed that females with lower entrepreneurial self-efficacy were most probably then males possess lower entrepreneurial intention (Shinnar et al., 2012).

### **2.6.3 Social capital**

Social capital described resources and support that a person established by their soft skills and societal collaboration, comprising the number of contacts, the degree to which support can be suspending because of bias, and immediate social context.

#### *2.6.3.1 Social network*

Numerous studies highlighted that academic entrepreneurship revealed that women are having less related business industry links compared to men. This aspect may lead to the tendency that female's faculty pursue more assistance from university technology transfer offices (Goel et al., 2015). Furthermore, the deficiency of females in an area can decrease spirits of belonging, and it negatively disturb cognitive capital. The position of being solo gender representative are having negative effect impact. For instance, stereotype risk more often shaken woman performance in public location if they are having solo status in a group, and single status woman is having negative perception regarding work force environment, which lead to affect satisfaction and job retention (King et al., 2010).

#### *2.6.3.2 Stereotype and biased treatment*

Stereotype and bias bring to bear an effect on female's social capital in that resources are consciously or unconsciously withheld in the background of social interaction. In the context of entrepreneurship, stereotypes are considered so dominant and that has been assumed that men are biologically having certain related skills (Obschonka et al., 2011). In addition to these, women are recognized to have less chance to accomplished as entrepreneurs compared to men because of personality trait like risk-taking (Fox & Xiao, 2013). This misconception that such skills are biologically inherited to men leave a negative impact on women cognitive capital (Sweida & Reichard, 2013).

#### *2.6.3.3 Social interaction*

Some of the studies pointed out that competitive environment can badly influence task performance for females as compared to men. One study highlighted that woman perceived public performance as an obstacle compared to men (Larkin & Pines, 2003). Furthermore, pointed out that women in relation to social interaction among teams, female students in STEM field have bad experience compared to men (Meadows et al., 2015). For instance, studies revealed that men can speak for long period of time, and women more likely considered less technical and more stereotype roles, like note taker or organizer (Hirshfield, 2015).

#### **2.6.4 Financial capital**

Financial resources signify a significant form of capital in technology entrepreneurship. For numerous problems addressed above, women are having obstacles to access funding (Klotz et al., 2014). Furthermore, women entrepreneurs be likely to obtain low private investment compared to men entrepreneurs by having same experience (Tinkler et al., 2015). May be or may be not this disparity in investment has been debated,

but women are less likely compared to men to initiate companies that are in service sector or smaller, that are less striking to investors (Kenney & Patton, 2015). Though, in the absence of obvious loan disparity, the expectation of potential bias causes an affect. As a result, women entrepreneurs request for limited loan from investors, and having less confident obtaining investment compared to men (Wheadon & Duval-Couetil, 2019).

## **2.7 Entrepreneurship education**

Entrepreneurship education can enhance awareness of venture prospects among students (Othman et al., 2020) and patience on behalf of ambiguity, which are measurements of the risk-taking approach. Furthermore, entrepreneurship education established the risk-taking approach grounded on signs such as occasion identification, interrogation, statement, and cooperation, which are also diagnostic (Rodriguez & Lieber, 2020). This is due to the fact that entrepreneurial education can enhance their courage in dealing with their career choices.

In advanced education institutions, entrepreneurship learning grounded in positive entrepreneurial role models can support education for sustainable development. Various theoretical points of view, including human capital theory, entrepreneurial self-efficacy, and self-determination, suggest that entrepreneurship education has a positive impact on the entrepreneurial intentions of learners and gives them appropriate know-how, courage, and skills to enhance their entrepreneurial careers (Boldureanu et al., 2020). In entrepreneurship education programs, introduction to effective entrepreneurial models may be an essential element for inspiring learners' motivation in their capability to begin ventures and enhancing their attitude toward entrepreneurship.

Entrepreneurship education is considered essential for risk-taking approaches and abilities; on the other hand, it does not have a positive impact on entrepreneurial readiness (Cayhani et al., 2022). But this conclusion also indicates that while the risk-taking approach and entrepreneurship ability are enhanced, they can also enhance the learner's risk-taking willingness. Furthermore, it also revealed that a risk-taking approach and entrepreneurial abilities interfere with the link between entrepreneurship education and innovative readiness.

Entrepreneurship education may take the form of both curricular and extracurricular events. Entrepreneurship education in the form of curricular events has less impact on the entrepreneurial mindset compared to extra-curricular events (Cui et al., 2021). The risk-taking approach showed through alertness to chances, tolerance of threats, patience for ambiguity, and being positive. Entrepreneurship education plans in extracurricular events have enhanced their risk-taking approach (Hoyos-Ruperto et al., 2017). Additional accomplishments play a significant role in accomplishing entrepreneurship education because they occur in casual settings but are still encouraged through organized assets (Laukkanen, 2000).

## **2.8 Current challenges to entrepreneurship education**

The field of entrepreneurship education expands substantially. This has made it more prominent in the domain of general education while also enhancing its methodological and theoretical quality. One advantage of entrepreneurship education is its ability to adapt to different contexts and circumstances; yet there are also present issues that require attention. A significant portion of entrepreneurship research has tended to

ignore other theoretical frameworks in favor of social psychology as a basis for attitudes, actions, beliefs, and actions (Linan & Fayolle, 2015). The tendency to generalize the subject has resulted in a stagnation of studies regarding the unique characteristics of entrepreneurship education. Novel research themes and possibilities of study must be identified to advance the field. According to Bendera et al. (2018), academics that offer entrepreneurship must alter the curriculum to account for cultural differences in learning.

Education in the United States, which emphasizes entrepreneurship, has been moving toward adoption on an international level. The number of Asian students studying abroad has risen substantially, with China being the country with the largest rise. Since then, there has been a focus on schools imparting knowledge that students may use in their home country's business operations. Furthermore, pupils are now participating in more competitions. An opportunity for international students to take part in an academically related business is available in the United States thanks to the Entrepreneur in Residence program (Anderson, 2012). According to Bendera et al. (2018) it indicates that entrepreneurship education must be compatible with the market environment.

The research is intense and dissatisfying due to the unforeseen future scenarios that it raises. More free online courses as well as quick YouTube videos about educational topics are being provided in the current digital learning ecosystem, which has industrialized and globalized entrepreneurship education (Gunkel, 2017). This has led to difficulties in determining how to personally connect with students while maintaining economies of scale. Virtual reality teaching techniques are expected to increase, and holograms will likely be used in classroom instruction. While some studies have suggested that the usage

of computer technology and robotics in educational institutions is growing, inventive research remains essential. It involves comprehending how to use different online resources for entrepreneurship education outside of the classroom as well as across the course (Minogue, 2017).

According to estimates, a significant percentage of future jobs will not exist anymore (La Grandeur & Hughes, 2017). This suggests that teachers of entrepreneurship have to look into the latest developments in employment and the best ways to impart these skills (Pepin, 2018). Considering the interest of the media in open content courses, there is an impression that these programs neglect local customs in favor of global entrepreneurship (Patru & Balaji, 2016). The dynamic nature of today's corporate climate is brought about by technological breakthroughs that are altering how individuals learn and teach. This fluid age has brought up both uncertainty and change-related opportunities. A large portion of this flexibility stems from the increased focus on the knowledge and service economies.

Students can now utilize knowledge and learn from anywhere because of mobile and internet-of-things technologies. As a result, entrepreneurship teachers can now impart knowledge in a fresh manner that considers modifications to the business environment. It can also be possible to check vast web libraries of previously published work for plagiarism thanks to online teaching tools like Turn it in and then tirade. Students can access vast amounts of data as a result, yet modern technologies ensure that their work is unique. Alongside this, there has been an increase in contract cheating as more students outsource their homework. Although it has been anticipated that entrepreneurship education will include more technology in the future, in addition, there has been a maker movement trend.

This is a moment when individuals construct things using their own handicraft skills. Additionally, there has been a shift in the number of casual workers and students who, at various stages of their careers, perform several jobs.

Traditional job patterns have been disrupted by the gig economy, especially for recent college graduates. The Association to Advance Collegiate Schools of Business introduced critical thinking in students as a prerequisite for approval, reflecting a shift in the use of critical thinking skills in business education (Dahl et al., 2018).

This is an aspect of the curriculum for students pursuing entrepreneurship who analyze and assess ideas in a way that enhances their mental capacities. By expanding on their subject expertise, students studying entrepreneurship achieve this (Pittaway & Cope, 2007). Technical reasoning and philosophical assessment are two categories of cognitive talents in critical thinking (Dahl et al., 2018). In technical reasoning, answers are derived through the interpretation of scientific facts. Critical thinking as technical reasoning encompasses a variety of cognitive processing tasks, including active processing, logical assessment, analytical thinking, and problem solving, according to (Dahl et al., 2018). Evaluating concepts philosophically entails considering their worth in light of one's views and opinions. This entails comprehending presumptions and modifying them in light of external circumstances (Dahl et al., 2018).

## **2.9 Entrepreneurship education philosophy**

More inclusion of an anthroponomic approach to education must be implemented in entrepreneurial education. According to Lu and Jover (2019) an anthroposophist perspective examines the relationships and connections that individuals have within



societies, as compared to focusing on the individual and the benefits of education. An increasing number of academic institutions have emphasized entrepreneurship education to assist students after they graduate (Ilonen & Heinonen, 2018). This is accomplished by highlighting the five primary levels of competence—receiving, responding, valuing, organizing, and characterization—that are inherent in emotional learning.

According to Nabi et al., (2017) the main outcomes of entrepreneurship education include modifications in mindset, adjustments in knowledge and abilities, viability, intention to start a business, impact on the community, rates of business establishment, and the success of the business. The inefficient walls and barriers that distinguish entrepreneurship educators from other professions and educational environments must be broken down in order to create a more transparent, community-connected learning environment. Taking education courses in school or university is becoming less popular, and more people are interested in lifelong learning (Agosto & Abbas, 2017). Due to this, the number of people taking online courses has expanded, as has the requirement for people to maintain their professional status. According to Ankrah and Omar (2015) there is a new and undiscovered market that requires more focus for entrepreneurship educators.

It is essential to create additional programs that focus more on real-world experience learning than on evaluation. In these new courses, alumni can work collaboratively to make learning enjoyable and community focused. Even though entrepreneurship education is extremely important, its effectiveness can rise when educators and students collaborate more with industry professionals. Students with peer mentors may find it easier to enter the workforce because of the emphasis on employability

for graduates (Holmes, 2013). "The contextual application of entrepreneurial characteristics and qualities (entrepreneurship); a state of being (entrepreneurship); and the creation of an entrepreneurial climate and support structure (entrepreneurism)" are the three categories that Brentnall et al., (2018) propose for entrepreneurship education.

Affective, behavioral, cognitive, related, and skill-based assessments are among the methods by which these many forms of entrepreneurship education can be evaluated (Longva & Foss, 2018). Evaluating how an individual's passion for entrepreneurship grows after learning entrepreneurship is one way to use effective measures. Learning about entrepreneurship may inspire some people to establish their businesses, but it may additionally motivate others to adopt an entrepreneurial mindset within their organizations. The degree to which a person exhibits entrepreneurial behavior is measured using behavioral metrics. Cognitive techniques that increase understanding of entrepreneurship, including enhancing comprehension of the process of launching a company enterprise. Conative measurements include evaluating one's own entrepreneurial efficacy. Assessments based on skills include evaluating the development of critical thinking capabilities and opportunity identification.

## **2.10 Trends in entrepreneurship education**

The way in which the methods of learning utilized by students in entrepreneurship education impact entrepreneurial intention has not been thoroughly examined (Bonesso et al., 2018). A student's inclination toward self-employment determines whether they are interested in an entrepreneurship course, but in the competitive job market, students are making a name for themselves with their distinctive combination of skills, abilities, and inclinations. According to Roulin and Bangerter (2013) this has led to an increase in

interest in extracurricular activities that contrast with the education a student has already received in a more formal context. Combining extracurricular activities with entrepreneurial education aids in strengthening the concepts covered in the classroom.

A growing number of entrepreneurial teachers are practicing what they are teaching in the classroom with real-world experiences through field trips, site visits, and living labs. Extracurricular activities may significantly impact learning if they are employed appropriately, according to earlier research by Cordea (2014). This is essential in more practical courses that emphasize practical application of the concepts being taught. Still, universities and other higher education establishments are adopting this concept to foster greater community involvement. Owing to the demands of many jobs, students must be able to manage their time well while also forming outside networks. This is possible due to entrepreneurship education provides students the resources necessary to take the lead in their professional development. The popularity of exchange programs for international students has grown as well, as government policy makers recognize the importance of cultural studies.

The increasing number of international students has resulted in a rise in transnational entrepreneurs - individuals who lives, work, and do business in multiple countries. Additionally, Silicon Valley technology companies have seen an enormous number of Indian immigrants, emphasizing the need of having foreign workers for start-up businesses. Therefore, even though the number of exchange students from outside has increased, there should be a greater focus on teaching kids about perseverance and commitment. In developing and transitioning economies, where political contexts may present difficulties for business owners, this is important.

In those countries, acting and pursuing entrepreneurship takes some training. In order to support students, grow their involvement in society, volunteering has been encouraged in entrepreneurship courses, especially those that have a social focus. According to Myers et al., (2013) volunteering has many advantages, including fostering personal development and boosting courage. Neal (2017) argues that for students to gain a firsthand understanding of poverty and its business potential, they must spend time completely immersed in poverty environments. According et al., (2018) students who experience novel locations may obtain a distinct learning outcome that differs from that of regular classroom settings. This leads to a symbiotic relationship wherein the community and the student learn together, improving society's social welfare.

### **2.11 Entrepreneurial competencies and need for local content curriculum**

One of the significant impacts of economic decline has been the increasing unemployment rate (Liotti, 2020). The reasons behind poverty in a country ought to be controlled accurately (Fatmasari et al., 2022). To cope with these challenges, learners must be able to prepare themselves and consider entrepreneurship as a substitute career (Arfah et al., 2023). This trend can be changed from job seekers to job creators and increase the ratio of entrepreneurs (Aqil et al., 2020). Efforts to inspire and influence students to choose entrepreneurship as a career choice ought to be encouraged by providing entrepreneurship education as a local content curriculum developed based on the results of an assessment or required analysis of entrepreneurial essential competencies.

Entrepreneurship is a viable performance that pushes the market process forward (Buccieri et al., 2020). This point contains an introduction to novel financial activity to

market an example of entrepreneurship. Entrepreneurship is expressed not merely through entering novel business markets but by creativity and initiative towards novel markets through the development of new firms (Yun et al., 2020). Entrepreneurs may be observed as individuals who pursue change, react to it, and reap the benefits of it as an opportunity. Entrepreneurs possess some personal traits like innovation, devotion, strength of mind, tractability, leadership, desire, confidence, and intellect (Patil et al., 2022).

Entrepreneurship is the genuine aspiration and capability within a person or team, outside or inside an organization (Mintrom, 2019), to (1) recognize and generate novel financial opportunities such as novel products, novel methods of production, novel organizational schemes, and novel arrangements of production markets (Ahmad et al., 2020), and (2) present their concepts in the market in the face of insecurity and other challenges (Fisher et al., 2020), through taking decisions related to location, form, and utilization of resources. Entrepreneurship skills must be communicated and are not fixed characteristics.

In order to initiate efforts by education to support entrepreneurship, an accurate curriculum is required (Ratten & Usmanij, 2021). Furthermore, it is essential to read and discover, with the assistance of studies, what competencies ought to be established in students relevant to entrepreneurship. Numerous past studies have revealed the significance of entrepreneurial competence in aspiring to the development of entrepreneurial aspects through education. Entrepreneurial competence is the ability to manage the business being initiated (Gieure et al., 2020), begin to plan wisely, delegate responsibilities according to a person's ability, carry out activity processes, and monitor

different activities carried out (Bismala et al., 2022). These skills are relevant to different areas of activity like finance management, resource management, including human resources, advertising, and manufacturing.

Entrepreneurial competence is considered a significant aspect of accomplishment in entrepreneurship (Boldureanu et al., 2020). There are various significant aspects of entrepreneurial competence, such as planning skills, strategic management knowledge, business management knowledge, interpersonal skills, responsive skills, and executing skills (Halberstadt et al., 2019). Entrepreneurial competency is considered a viewpoint solution for small enterprises in terms of business performance (Hashim et al., 2018). With their entrepreneurial competencies, they may utilize company abilities as a means to encourage their company's operations to enhance their performance.

The goal of entrepreneurial education is to raise awareness and comprehension of entrepreneurship as a process (Li & Wu, 2019). Secondly, the major aim is to increase learners' awareness and understanding of entrepreneurship as an alternate career choice (Liu et al., 2019). In addition, to enhance entrepreneurship, significant primary efforts must be made to discover local entrepreneurial resources, evaluate relevant competencies essential to being entrepreneurs, develop entrepreneurship education schemes as high school local content curricula, and run curricula to measure their efficiency.

The fundamental and basic competencies comprise the knowledge, skills, and attitude entrepreneurs ought to have. There are six fundamental entrepreneurial competencies for the local curriculum: (i) recognizing venture opportunities and manipulating ventures; (ii) executing decision-making activities; (iii) executing human

resources; (iv) executing commercial and marketing activities; (v) executing financial management; and (vi) recognizing behaviors and attitudes. This gives knowledge to educational stakeholders to enhance education quality through increasing its application in graduates' employment (Djubaedi et al., 2023).

## **2.12 Entrepreneurship knowledge**

Entrepreneurship knowledge is acquaintance obtained through the entrepreneurship learning process acquired by learners at school considering how to get benefits of venture opportunities to be developed money-making venture opportunities, how to begins novel ventures, generate novel addition, generate novel products and services as means for entrepreneurship (Anggriawan et al., 2018). Entrepreneurial knowledge may be concluded as an individual capability to think of, read, comprehend and apply the knowledge in the mind, so the brain can motivate the body to transport into entrepreneurial activities (Agusra, 2021).

Entrepreneurial knowledge is considered anything relevant to information the it is organized and handled through a cognitive scope that exist in our brain, then comprehend the process, build courageous factors in initiating risk reasonably and sensibly if you are willing to organize a venture (Sapitri, 2020). According to Muawwanah et al. (2020) entrepreneurial knowledge is considered all that knowledge inside our brain and comprehending of how to perform business further that it provides courage to initiate risk in beginning, look after and establishing a venture. Entrepreneurial knowledge also needed an individual capability to generate something novel through innovative thinking and actions, so, that opinions or opportunities may be initiated and utilize for something productive.

Entrepreneurial knowledge as an individual capability to think of, study and utilize information inside brain, so the brain may support the body to established entrepreneurial activities (Septiany, 2019). With the help of entrepreneurial knowledge, individual may generate numerous ideas and creativity in the area of entrepreneurship. Entrepreneurial knowledge is considered that information obtained by learners at school and outside school relevant to be get befits of business opportunities. The work of entrepreneurs is put together sustainability, established so that in later it will be carried out in other hands effectively (Suryani & Sunanik, 2019).

### **2.13 Technology and entrepreneurship**

Technology in general refers to the empirical utilization of science in the industries or as knowledge structure utilized to construct tools, skills, and material to cope with existing challenges. On the other hand, entrepreneurship is taken from a word entrepreneur, which refer to an individual who create a business with confidence to handle risk and ambiguity in order to gain benefits and development through the recognition of prevailing opportunities. Technopreneurs is a person who utilizes technology and marketing as core selling point to run technology-based entrepreneurship or business with courage. Typical entrepreneurship and technology base entrepreneurship need to be distinguished. Technological entrepreneurship ought to be flourish in two ways: make sure that technology address the desires of focused customer and that it would be sold successfully. Typical business only targeting the second part, considerably profitably selling (Purwati & Hamzah, 2022).

Companies from a variety of sectors have been implementing initiatives that investigate and take advantage of new digital technology innovation during the past decade



(Matt et al. 2015). The organizational efforts that are being done by the businesses that are using digital business techniques are highlighted, as well as "how technology provides individual entrepreneurship" (Majchrzak et al. 2016).

Technology based entrepreneurship is the solution to current problem, because technology-based entrepreneurship is the enhancement of the notion of entrepreneurship through utilizing technology as resource for entrepreneurship. As is identified today that technological advancement is growing rapidly and human resources are need to in a position to learned current technology. The utilization of technology in technology-based entrepreneurship is frequently utilized through the use of social media platforms or the internet to establish the venture that has been initiated. The emerging of the notion technology-based entrepreneurship is recently beginning to make stronger starting from high school to college. Technology based entrepreneurship is most significant to be carried out by universities due to this technopreneurs are considered unique from typical entrepreneur who we can learn rapidly (Purwatti & Hamzah, 2022).

Elements that play a significant role in motivating technology-based entrepreneurship learners are considered environmental elements, such as instrument readiness and technology readiness. Instrument readiness in order of various things such as access to wealth, information and societal networks. Access to wealth is a traditional obstacle, specifically for a person who is in the position to initiate a novel business. More generally it is obstacle in developing countries, the reason is economic investor are not too wealthier (Daulay, 2020). Past research investigated that, the core obstacles to flourish a business to encourage entrepreneurs in developing nations are challenging to gain wealth, credit schemer, and economic system obstacles (Herkenhoff et al., 2021). A study pointed

out access to wealth is one of the significant issues to flourish a trade (Nigam et al., 2020). In more general words, easy access to wealth for a venture, the more flourished business it will be. Though, it denies past research, which pointed out no positive impact of access to wealth on entrepreneurial intentions (Zarrouk et al., 2020).

## **2.14 Digital transformation and entrepreneurship**

Digital transformation has emerged a prominent area in current for business practice and research. Numerous standards have been set an important change in society and business carried out through the utilization digital technology. Though, it has been stated that businesses ought to search methods to innovate with these technologies through establishing techniques that get benefits of digital transformation and advance working performance (Vial, 2019). According to definition of digital transformation that a modification in complete productivity and employment creation methods, applying all adaptive running techniques to competing, swiftly satisfying growing needs, a method of reestablishing a business to digital working processes and creating operational supply chain relationship, operational utilization of online platform in outline, productivity, promotion, trying to trade, and initiating, and data-based management (Ulas, 2019).

Digitization is the route of adapting physical resources to an online resources or digital resources (Henriette el al., 2016). The significant part of digital transformation is considered that businesses ought to utilize digital technologies and remain competitive. The notion is to utilize digital platforms and internet to provide online and offline services both (Mergel et al., 2019). Consequently, digitization of business practices will carry on and digital customers are tired to vast numbers of technological inventions due to their speed and relevant ease of utilization, as well as increasing cell phone technologies that

permit search, payment, and other chores, they ensure the drop of wellbeing threats (Mitrofanova et al., 2022).

Any technology value and effect on business performance are reliable on firms appropriately implementing it, therefore it is essential to comprehend the factors linked with technology acceptance. Although small SMEs are more flexible, faster, and boundary less, resource constrain, and knowledge gap regularly stop small enterprises from assessing and applying digitalization prospects. This enables us to ask how may SMEs effectively utilize their limited resources to chase digital and data-driven invention while restraining the chances of failure that might follow from executing their corporation's digital transformation (Barann et al., 2019).

Investment in information technology is developed primarily to help and support novelty (Bagale et al., 2021). Meanwhile, SMEs started integrating digital technology into their practices to enhance their contribution (Troise et al., 2022). As a result, unlike big enterprises, SMEs are not in position to invest more income in digital technology. Furthermore, accepting digitization and technology SMEs practices was not direct as predicted (Parker & Castleman, 2007). Internal knowledge, technological ability, company size, partial capital, and shortage of resources all are having effected SMEs technological or digital initiative. Other than these limitation, numerous academies discovered the aspects effecting SMEs implementation of digital technology from various point of view (Klein & Todesco, 2021).

Taking advantage of changes and entrepreneurial possibilities is made possible by the continuing digital transformation, which is the deep and accelerated transformation of

businesses' processes, activities, and competencies (Bohnsack et al. 2018; Pesch et al. 2018). Nowadays, digitization may be seen as one of the key issues that businesses and the global economy must address (Laudien et al. 2018). Everyone with a keen interest in modern developments will be familiar with the word "digitalization" and at the very least be able to discuss some of the concerns around it. Considering the wide-ranging effects and changes this phenomenon has, it is crucial for business owners to be aware of associated consequences and relationships (Ferreira et al. 2019).

### **2.15 Digitization of entrepreneurial activity and sustainable competitiveness**

Sustainable competitiveness is defined as the capability to create and preserve capital without shrinking the upcoming ability to maintain and enhancing existing level of income (Jovanovic et al., 2018). It is very difficult to exceed economic growth as it responsible for aspects that drive a country towards sustainable capital and long-lasting development (Delgosha et al., 2021). Furthermore, the concept of sustainable competitiveness is not only limited to measure national capabilities to grow towards medium and long-term goals, but it also addresses the growth process is establishing society where individual willing to spend life (Bilboa-Osorio et al., 2013). During the previous decade, competitiveness has been dynamically supported as a channel of accomplishing the essential changes in the economy, society, environment, and globally it is considered the essential aim of their policy of economy (Depotovic et al., 2016).

In current era, sustainability and sustainable growth significant are the having the topic of crucial significant for practitioners and academics both (Secundo et al., 2020). Furthermore, sustainable development is rapidly observed as the essential factors for

various policies, as it includes accomplishing environmental, economic and social sustainability aims (Brahambhatt et al., 2017).

In past decade, the growing number of various nations have considered to be more depended upon technological abilities and have switched to digitization whereas tracking efforts towards accomplishing sustainable competitiveness (Jovanovic et al., 2018). In addition, previous research argued that digital transformation is significant aspect in achieving and safeguarding sustainability and generates various mechanism to sustain and increase nation capital, natural resources, and prosperity (Akande et al., 2019). Digitalization has initiated thoughtful changes at both society and economic level, which defends the need towards vivid understanding of its transformative power particularly its impact on sustainable competitiveness (Grigorescu et al., 2021).

Being in various aspects, entrepreneurship is able to increase sustainable growth, being as entrepreneurs, in various cases, coping with entrepreneurial challenges and might lead to sustainable economic growth (Ferreira et al., 2019). As mentioned by Herrington et al., (2014) highlighting the nature and effect of the linked among economic development and entrepreneurship is more significant to assistance decision making to allocate resources and frame suitable policies. This relation was previously highlighted in the literature, the most proponent results pointed out a positive link among the two factors, such as entrepreneurial activities may bring high economic growth (Meyer & Meyer, 2017).

In addition, past studies investigated that the utilization of novel technologies can gear up and maintain sustainable growth among countries and contribute effectively towards entrepreneurship (Afawuba & Noglo, 2017). Entrepreneurial activities that permit the utilization of digital technologies show that we are recently run into a novel digital

revolution. Entrepreneurship is recognized as significant aspect for economic growth and lead to further studies to highlight how digital technologies can increase entrepreneurship performance (Fernandes et al., 2022).

Digitalization refers to many ways where different aspects of government, businesses, and societal life are reshaped utilizing novel digital technologies (Brennen & Kreiss, 2016). In the past decade, human being has perceived rapid development in the flow and utilization of digital technologies, and these technologies have slowly become a basic element of a nation drive for inclusive, competitive, and above all sustainable society and economy (Gouvea et al., 2018). There are various ways through which digitalization can affect economic development. Digitalization consists of activities which ultimately produce information and communication products, which in results directly add to increasing growth and productivity.

Digitalization nurtures the growth of human wealth gained through training, good healthcare service, and education, which lead to contribute towards economic development (Myovella et al., 2020). From economic growth point of view, digitalization is referring vital for attaining sustainable economic growth as a result it can increase economic productivity and enriched global commerce and can lead to enhance in the number of economic and social challenges inside a country (Cioaca et al., 2020).

In addition, utilizing digital technologies bring novel opportunities to support entrepreneurship orientation as it assists improve processes, strategic and managerial decisions, and product customization (Aagaard et al., 2019). Digital technologies are shifting the nature of entrepreneurial activities. Technologies can smooth and drive the creating process through giving extra access to finance by crowdfunding, utilizing cloud

computing to reduce communication charges, and considered artificial intelligence to decrease investment in human labor (Von Briel et al., 2018).

## **2.16 Entrepreneurial ecosystem**

An entrepreneurial ecosystem is recognized a vigorously composed system comprising of reliant subjects and entrepreneurial environment (Lu et al., 2021). Its input level is grounded on element situation that permit or constrain entrepreneurship (Stam, 2018). Useful entrepreneurship builds the output of an entrepreneurial ecosystem. This refer to the creative activity of entrepreneurs which leads to the commercialization of novel opinions and knowledge and lead to financial growth in various region.

Entrepreneurial ecosystem method has increased significant among researchers and practitioner's in comprehending an environment for creative entrepreneurship (Feld, 2020). Though, the relationship among ecosystem aspects and creative entrepreneurship leftover reasonably ambiguous (Nicotra et al., 2018). Comprehending this relationship is significant to make sure the supreme promising environment for mounting creative entrepreneurship, which a result to laid emphasize on economic development in specific region.

Numerous research highlighted that entrepreneurial ecosystem method may utilize for making academic researches on entrepreneurship and territorial growths. This method indicated exploration of two core layers: the aspects of an ecosystem notably (input) and productive entrepreneurship notably (output) (Spigel, 2017). The relationship among aspects and productive entrepreneurship is challenging to enlighten because of their

independence. Aspects affect productive entrepreneurship, but with period, output also responses to input (Stam, 2015).

The core obstacle in recognizing aspects rises from entrepreneurial ecosystems various roots and complication (Spigel, 2017). Even though there is common method to categorizing the aspects of entrepreneurial ecosystem, various researchers and practitioners have investigated to generate categorization and means for evaluating them. The association of entrepreneurial ecosystem aspects was grounded in Stam (2015) model because it gives the utmost complete opinion of an entrepreneurial ecosystem, comprising institutional engagements and resource donation elements. This model consists of 10 attributes: prescribed institution, entrepreneurship environment, setups, physical infrastructure, economics, leadership, aptitude, novel knowledge, ultimatum, and transitional services.

Prescribed institution redirects the guideline and role of administration in creation of ecosystem. Entrepreneurship environment establishes the values of entrepreneurship. It comprises of an entrepreneur's creativity, readiness to initiate risk, courage and self-regulation. Physical infrastructure comprises of digital infrastructure and transport, which backing the growth of entrepreneurship. Demands indicate the willingness of customers to purchase a product or avail a service. Setups linked actors and their willingness for identical discussion. Economics indicate access to various economics resources. Leadership illustrate individual who perform leadership role in entrepreneurial ecosystem. Aptitude reflects the labor market and higher education. This highlighted high qualified individual or expert in market who backing entrepreneurs in the process of establishing a business. Research and development investment are comprised in the aspects of entrepreneurial



ecosystem as a novel knowledge. Intermediate services elements through informal institution like incubators.

### **2.17 Entrepreneurial readiness in the age of industrial revolution 4.0**

Currently, we move into industrial revolution 4.0, where innovation, entrepreneurship, leadership, and quickness through the utilization of vast technology are recently recognized as a significant thing (Irawan, 2016). Results of industrial revolution 4.0 carry profits and prosperity to society like getting economical stuff and enhancing life quality, instead of growing economic problems of society and upsurge unemployment. The industrial revolution 4.0 fetches the concepts collaboration among digital technology in internet form and conservative industries meant to upsurge productivity, effectiveness and customer service considerably (Raymond, 2016).

Entrepreneurial readiness during industrial age 4.0 is describe through various factors, to be self-confidence towards success, comprehending entrepreneurial risk, show efforts to initiate various things, continue hard work and dedication, be discipline, be courageous, and have the quality to use internet-based information technology. Furthermore, it is revealed that engineering learners have high attitude towards entrepreneurship contrast to other aspects like support and struggle, locus of control, need for accomplishment, entrepreneurial intentions, instrumental readiness and personal values (Mat et al., 2015).

### **2.18 Entrepreneurial culture**

Entrepreneurial culture that be present among university administration, staff faculty, and learner is essential requirement and considered one of the significant pillar of

an entrepreneurial university (Etzkowitz & Zhou, 2017). Entrepreneurial culture generally considered as norms, attitude, opinions, supposition, values, and behavior representing entrepreneurship in various cultural perspective. On a national level, entrepreneurial culture considered as nation societal values and attitude in context of entrepreneurship and academic study on this problem mainly discovers the association among entrepreneurial practices and national culture. Furthermore, walk around entrepreneurial culture on organizational level has upturned high interest. In some studies, entrepreneurial culture has been recognized as a kind of organizational culture hold and represent entrepreneurial features and traits, like opportunity identification, innovation, risk-taking and creativity (Lahikainen et al., 2022).

Research on exploring learner's perception of entrepreneurial culture are less in number (Clauss et al., 2018). Previous research pointed out organizational and individual both aspects affecting learner perception of entrepreneurial environments at higher education institutes (Bergmann et al., 2018). Research analyzed learner perception of entrepreneurial environment in their university. The finding highlighted that a normal learner had have unclear knowledge of various manners in which their university backing entrepreneurial thinking and practice, the learner's opinion was affecting through typical university features, like reputation and size compared to the genuine entrepreneurship action (Bergmann et al., 2018).

Nurturing an entrepreneurial culture is perceived one of the significant building blocks towards flourishing entrepreneurship in higher education institutes (Afrivie & Boohene, 2014). The development of entrepreneurial culture at university level can be initiated as a simple institutional notion representing change, later explained a bunch of

opinions which if they are spread all over the academies can nurture towards a university wide environment strongly implement in practices. Though, an entrepreneurial culture is multi-dimensional phenomenon and may express different meanings, which make it challenging to conceptualize (Wong, 2014).

Past research pointed out that entrepreneurial culture may be perceived different compared to organizational culture which express entrepreneurial features like opportunity identification and risk-taking, innovativeness, creativity, and search for change (Wong, 2014). As Hannon (2013) pointed out, the formation of entrepreneurial culture begins with constructing governance structure, administrative policies, and condition that support the growth of entrepreneurial mindset and attitude inside organization. Therefore, if a higher education institution pursues to be considered as an entrepreneurial organization, the awareness about entrepreneurship ought to be recognized and rooted in all of its practices. Otherwise, the values showed are not constant towards those espoused (Peltonen, 2014).

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## **2.19 Human and institutional factors and entrepreneurship**

According to the findings of current literature research, institutional variables and human capital support entrepreneurial chances to gain more economic progress rates (Chitsaz, 2019). Further it is advocated that non-governmental organization have a greater influence on entrepreneurship chances as compared to official organizations. In terms of policy consequences, Aparicio's study findings also demonstrate that it is feasible to achieve economic development that motivates the proper institutions to boost entrepreneurial opportunities. The findings of Bosma's (2018) also considered too looked at how effective institutions are at fostering successful entrepreneurship, which in turn may promote economic growth. Furthermore, the findings of Bosma (2018) demonstrate that, by taking into consideration the degree of institutional and collaborative entrepreneurial activities, a quality economic growth model may be significantly improved in that direction.

More than any previous significant foreign enterprise, the expansion of UMKM entrepreneurship is also increasingly seen as the major factor of long-term local economic progress (Bell, 2013). The results of the Acs (2018) results reveal that NSE (National Systems of Entrepreneurship) are favorably and significantly associated to economic growth, supporting the idea that the entrepreneurial ecosystem plays a role in economic growth. According to Bjornskov (2016) research, there is strong proof that supports the idea that entrepreneurship has significant long-term economic effects on income, production, and economic expansion.

## **2.20 Human and social capital and entrepreneurship**

Chitsaz (2019) found that employed two types of human and social capital to investigate entrepreneurship; communicative, structural, and cognitive characteristics were used to assess social capital. In the meanwhile, the knowledge, skill, and self-efficacy aspects are employed to explore the human capital emphasis. According to Chitsaz (2019) entrepreneurship development is a complicated, prolonged, and thorough process that plays an important part in the growth of the nation's budget. The findings of Chitsaz (2019) demonstrate a strong impact of human and social capital components on innovative activity.

A model that has been presented for investment in human capital which share commercial and creative industrial expertise (Ehrlich, 2017). Ehrlich (2017) concluded that economic growth is specifically driven by human capital. By enhancing investment productivity in the entrepreneurial human capital rather than only on his or her self, institutional variables that enable the open market space for products, concepts, and better educational accomplishments from employers and employees are considered to increase endogenous economic progress.

## **2.21 Theories of entrepreneurship**

### **2.21.1 Social cognitive theory**

According to the social cognitive theory (SCT) (Bandura, 1986), behavior, environment, and individual differences all interact in a dynamic way to influence learning in a social setting. According to Bandura's concept of SCT, "environmental inputs, personal factors, and behavioral outcomes all interact inversely and, in both directions, to produce learning, motivational, and behavioral processes" (Biraglia & Kadile, 2016).

Environmental inputs, however, cover all aspects relevant to the societal and traditional perspective where individuals gain, and which offer opportunities for participation in society (Bandura, 2012).

Self-efficacy is the fundamental principle of the SCT, according to Bandura (2012), and it is proposed that people's capacities to succeed as entrepreneurs due to their aptitudes and talents may be viewed as self-efficacy. According to Stroe et al. (2018), self-efficacy is a psychological process that motivates people to carry out their duties in order to meet their goals. Additionally, it is an intellectual and individual component which makes people recognize their strengths in carrying out specific behaviors (Bacq et al., 2017).

According to SCT, as people estimate of their surroundings and choice to engage in any behavior may be influenced by personal aspects such as gender, age, career, opinions, intellectual abilities, and sensitive condition (Bandura, 2012). Biraglia and Kadile (2016) claim that "intellectual abilities and emotional states, in general, may play a significant part in the recognition of social contextual cues and the result to take part in precise actions." On the basis of this context, research (Thorgren & Wincent, 2015) identified passion as a crucial feeling among students who may be interested in starting their own businesses after graduation, applying passion as passion for entrepreneurship.

### **2.21.2 Entrepreneurial success component theory**

The essential elements of startup success were developed using a qualitative methodology by Gibb and Ritchie in 1982. Innovation is viewed as a social process from this angle. This is because aspirations and ideas develop within social contexts. Even though it is hard to say that entrepreneurs can be fully developed, this theory contends that they may be helped to create profitable and long-lasting firms. Even while a person's unique

personality is important, caste structure, familial influence, societal difficulties, education, job route, experience, and contemporary lifestyle can all be having influence on a person's career. According to this theory, contextual factors can influence someone's life in a way that leads to the development of a successful firm without relying on genetic traits for entrepreneurship.

Entrepreneurial success components the theory places a special focus on four key success factors: ability, opportunity, resources, and motivation. These elements will positively or negatively impact a person's ability to start their own business who has lower earnings. Using the theory as a guide, it was found that motivation was impacted by the balance between a desire for freedom and a more practical understanding of the need to overcome challenges including obtaining resources, managerial skills, and other challenges. In order to establish a business, a person must be motivated, have a goal, and be committed to achieving it (Khan et al., 2021).

Recognizing the motivation factors or reasons for launching a business is the first step in starting one productively. Coming up with a feasible notion comes next after getting such as motivation. To determine if this idea will meet a client's demands, it must first be tested and proven to be desirable. The next step is to locate essential resources that are required, including finances, and trustworthy dealers. In order to put the concept into practice and ensure the success of the businesses, a business must be launched, and a professional community must be established. According to Maryam & Thomas (2015) there are four fundamental success factors.

The theory of entrepreneurial success components developed by Gibb and Ritchie (1982) builds on Watkins' (1976) research. According to the theory, passion grows as a

person learns in a social environment. Along with one's socioeconomic status and other societal difficulties, elements including working preference, employment experience, daily routines, and relationships with others are all thought to have a significant impact on why people choose entrepreneurship as a career. According to Gibb & Ritchie, "the desire regarding entrepreneurship and the choice to initiate a venture is typically achieved at in the later stages of life (Khan et al., 2021).

### **2.21.3 Lazear's theory of entrepreneurship**

Accepting part of knowledge in typical entrepreneurship, the researchers are looking for a philosophy which is grounded in social capital and relevant to create an entrepreneurship. The general supposition basic career choice theories are that person shift among various job-related decisions, from be self-employed to fixed pay jobs, rely on the profits and prices, one of the justifications for why individual to considered the entrepreneurship route is given by Lazear (2005) and his theory of entrepreneurship.

Lazear theory expects and enlighten access towards entrepreneurship. It supposes that entrepreneurs required essential knowledge and skills in various capacities to create a business, whereas waged worker get benefits of being expert in various capacities that is required for the labor space. It highlighted that entrepreneurs are basically to have more skills and experiences which are considered accompanied through the expert knowledge of their workers (Kurczewska & Mackiewics, 2023). On practical ground, this theory suggests that person with different background, both in work experience and education, which play diverse role in their career, having more opportunities to be an entrepreneur that individual who chooses one predefined way.



Lazear theory is considered significant theories of entrepreneurship that make sure to enlighten the choice to turn out to be an entrepreneur by considering individual knowledge and skills obtain through vast education and different experiences (Kurczewska et al., 2020). In route through this theory that is created on different groups of social assets, the researcher predict that typical entrepreneurship is considered effective in trade. This assumption is taken from lazear theory. Beside this the identification of essential of habitual entrepreneurs, the researcher yet not identify more regarding what turn towards more entrepreneurs habitual. One justification is considered that the route beginner to a habitual entrepreneur is the sum of collected knowledge (Kirchner, 2010). As a results, aspects relevant to human capital are specifically applicable for more exploration, although it is not restricted to entrepreneurial experience. Beside all these, if experience is capable to enlighten all, every entrepreneur might be, with the passage of time, grow into a habitual entrepreneur.

The knowledge and skills that individual is having is generally linked with the results of education (Jafari-Sadeghi et al., 2019). As a results, beside professional experience, educational background can play vital part in habitual entrepreneurship processes (Leonelli, 2022). Education and experience both of entrepreneurs are considered part of Lazear theory of entrepreneurship (Lazear, 2005). Experience convert into knowledge. Due to the overall knowledge that obtain from practice, habitual entrepreneurs are generally considered as significant entrepreneurs who established distinctive mental styles and inventory behavior (Wiklund & Shepherd, 2008).

Lazear (2005) proved his prediction on a sample of Stanford MBA alumni, and this theory was latterly verified in various researchers, for instance, Hartog et al., (2010),

Backes-Gellner & Moog (2013), Astebro & Thompson (2011). This theory has been revised in various ways and verified on different samples such as Tegtmeier et al., (2016), Strohmeyer et al., (2017) verified this theory from gender point of view, Kurczewska et al., (2020) identified perspective to enlighten hybrid entrepreneurship, and Mackiewicz & Kurczewska (2020) examined the factors of accomplishment and venture establishment on the base of this theory.

#### **2.21.4 Human capital theory**

Human capital has a role in the success of entrepreneurs when the human capital theory is used in the entrepreneurship area (Unger et al., 2011). Human capital is essential for identifying and generating venture possibilities, taking advantage of business prospects (Dimov, 2010), learning novel information, and developing modest rewards for novel enterprises (Bradley et al., 2012). Overall human capital and particular human capital are both included in the human capital theory (Becker, 1964). According to the human capital hypothesis, an entrepreneur's personal qualities are what enable them to start a firm through the initial phases of struggle (Foss, 1994).

Human capital is divided into two groups by Marvel (2013): human capital outputs, or knowledge, skills, and capabilities, and human capital investments, which include recruiting, education, experience/training, and experience. Human capital produces skills as its byproduct. An advantage can be had when beginning a firm if entrepreneurial skills are used (Marvel, 2013). Investments in training or experience allow one to strengthen their skills. It may be developed through a mix of formal education and hands-on experience.

The theory of human capital, according to Mincer (1958, 1966); and Schultz (1962), presupposes an increase in income pays with the addition of education years. According to

the notion of human capital, employees with the highest levels of formal education are paid more than their counterparts with lower or no levels of education. The idea of human capital describes education as a time and money commitment. By providing required training and skills in the form of formal schooling, education increases worker productivity. As a result, increased productivity raises individual employees' wages (Mulongo, 2012). Additionally, personal productivity affects income. According to Becker (1962) and Schultz (1961), more years of education increase employees' output because of the level and quantity of their classroom instruction and on-the-job training. It is considered that variations in employee output are often correlated with variations in the amount of time each person invests in their education and training.

### **2.21.5 Theory of entrepreneurial thought and action**

Entrepreneurial thought and action theory is an approach towards encouraging learners to generate, explore, and utilize prospects. This approach is grounded on models like the entrepreneurial model of Timmons (1989), lay emphasize on the overall process of “learning by doing” concept of practice, establishing the trinity of entrepreneurship instructional practices of learning (Learn), action (Act), and formation (Build). Through inspire the inner notions, application of notions into action, and later establishing based on actions, novel ways of thinking are inspiring, and complexity of entrepreneurial thoughts and activity is slowly shaped.

#### *2.21.5.1 Learning*

A study conducted by Krizner (1983) on the notion of entrepreneurial knowledge, it pointed out the difference between entrepreneurial knowledge from general knowledge and considered it as a knowledge to obtain and apply information, resources, or general

knowledge. Even though, this definition of entrepreneurial knowledge is considered abstract, it also considered as a guide for upcoming generations to comprehend entrepreneurial knowledge as genuine base. Alvarez & Busenitz (2001) investigated the meaning and function of entrepreneurial knowledge grounded on resource-based theory. They highlighted that entrepreneurial knowledge to explore and obtain possible valued resources, use and mix these resources, and search for path for entrepreneurs to accurately allot exclusive knowledge and identify market opportunities to gain more revenue and approach ability.

The notion of financial charge to further discover the core mechanism of entrepreneurial knowledge in process of establishing novel business (Alvarez & Barney (2004). By enhancing the entrepreneurship education, studies on the role of entrepreneurial knowledge in entrepreneurship education has gain the interest of the research. Entrepreneurship knowledge is the sum of comprehending and knowledge of entrepreneurial actions, which indicate the hidden capability and intrinsic motivation of entrepreneurs to recognize and apply opportunities to create business (Roxas, 2014). It is pointed out that one of the elements for entrepreneurial failure is limited entrepreneurial knowledge and entrepreneurial skills of entrepreneurs and their peers. (Liberona et al., 2019).

#### *2.21.5.2 Action*

Action basically indicates that giving learners entrepreneurial practice prospects, motivating learners to implement the entrepreneurial knowledge and skills they have mastered to real entrepreneurial decision making as to practice their teamwork and leadership skills, nurture their ethical sense and social responsibilities, and monitor them

to self-evaluation, which will guide them to flourish (Brush, 1989). According to the available research on entrepreneurship education, it is mainly held that the entrepreneurial capability of college learners should be gain from various point of view. A set of different types of knowledge, capabilities, and entrepreneurial features that are necessary.

Entrepreneurship is based on applied means and is considered as a collection of fundamental features like specific and general knowledge, motivation, qualities, societal role, and skills (Bird, 2019). Entrepreneurial capability is the capability to recognize and follow entrepreneurial opportunities in a particular context and position (Lans et al., 2014). This research also highlighted entrepreneurial ability can be comprised of opportunity recognition, interpersonal communication capability, venture activity capability, particular industries capability, and self-efficacy as considered five significant skills. The new research investigated that entrepreneurship education may be positively enhancing learner's entrepreneurial capability (Nguyen & Nguyen, 2023).

#### *2.21.5.3 Creation*

Entrepreneurial thought and action theory laid emphasize on establishing process of the harmony of skills and knowledge (Brush, 1989). Babson business school targeting the harmony of action and knowledge. Plenty of co-curricular processes give more courses, capitals, and discussion for learners that provide them with the prospect to gain by performing. Numerous academic conferences give learners through the prospects to share and debate entrepreneurial challenges and come up with solution to entrepreneurial challenges, so, that learner may enhance their entrepreneurial notions. Different studies supporting tactics of the institutes also ensure learners with entrepreneurial funds (Li, 2019).

## 2.22 Entrepreneurial attitude

One of the key drivers of socio-economic growth is entrepreneurship (Coulibaly et al., 2018). The person's frame of thought that focuses their concentration and lived experience on deliberate entrepreneurial action is known as entrepreneurial attitude (Do & Dadvari, 2017). As suggested in previous studies, an entrepreneurial attitude is substantially correlated with entrepreneurial ambition (Do & Dadvari, 2017).

According to Jin (2017) psychological sources are a significant measure of profitable entrepreneurship. The psychological aspect is completely correlated with the ambition to establish an enterprise (Ghani et al., 2013). These results demonstrate a positive relationship between psychological capital, improved performance, and positive thoughts, both theoretically and experimentally. While psychological source is a new concept in industrialized nations, it is thought to be a crucial factor in entrepreneurship (Yousaf et al., 2015).

An increase in psychological empowerment would thus positively impact entrepreneurial orientation while also enhancing performance. Individual personal professionalism and entrepreneurial quality are positively related to effective psychological sources (Rasyid & Bangun, 2015). Meanwhile, the psychological source functions well as a negotiator between attitude orientation and entrepreneurship purpose.

According to Zaremohzzabieh et al. (2019) social capital might affect social entrepreneurial intention through perceived behavioral control. They advocated using the TPB model for the creation of intentions for social entrepreneurship. Similar to this,

Malebana (2016) modified the TPB model and claimed that social capital modulates perceived behavioral control in entrepreneurial intention. Perceived behavioral control, according to the TPB theory, relates to the function of control beliefs, beliefs about the existence of circumstances that make it easier or more difficult to carry out actions, and views towards how powerful these factors are. Similar to the idea of psychological capital, which also encompasses self-efficacy, optimism, hope, and resilience, perceived behavioral control is a notion.

Entrepreneurial attitudes refer to profit and favorability and individual observations of entrepreneurship that affected their beliefs or thoughts towards new venture creation. According to Baum and Locke (2004) they worked on different entrepreneurship trainings and programs to boost students' entrepreneurial attitudes and efficacy regarding entrepreneurship.

Entrepreneurial attitude and entrepreneurship gain more consideration both in research and academia. Entrepreneurship is connected to the to the creation of values such as financial stability, ongoing enterprise renewal, and employment (Tang & Koveos, 2004).

Entrepreneurial attitude is a point to which human beings show their abilities to gain marketplace. The university atmosphere plays a vital role in enhancing students' entrepreneurial attitudes (Zollo et al., 2017). The notion that engaging in entrepreneurial behavior will have several effects, as well as the perception of those outcomes, determines one's attitude towards such behavior. Hence, people will probably have a favorable attitude towards that particular behavior if behavioral beliefs imply that positive results may be attained by engaging in that particular behavior (Cavazos-Arroyo et al., 2017).

An entrepreneurial attitude is thus referring to being innovative, having self-confidence, being creative, taking risks, exploring their own thoughts and beliefs, and working according to these attitudes. Students, teachers, and school leaders have different experiences in their working environment, and these influences compel them to acquire these attitudes.

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## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Research approach**

The main objective of this research was to assess entrepreneurial readiness among university students and to compare the entrepreneurial readiness of students based on gender. Achieving both major objectives need quantitative data and their statistical interpretation. For this study, the researcher used a quantitative research approach. In the quantitative research approach data are collected in the form of numerical from large groups.

#### **3.2 Research design**

The research design of the study was determined through the objectives of the study. Keeping in view the objective of this study. In this present study the researcher compared the student's entrepreneurial readiness of public sector universities of Malakand division due to limited time. A descriptive comparative research design was used in this study.

#### **3.3 Population**

As researcher focused on making a gender-based comparison of students' entrepreneurial readiness at higher education level at public sector universities located in the Malakand division. Due to this for present study both male and female students of Malakand division were the population of this present study. According to the latest update of university officials, the total number of students is N=6661 where males N= 4130 (62%) and females N=2531 (38%) students enrolled in social sciences and management sciences departments at public sector universities located in Malakand division.

Table 3.1

*Total number of male and female students in public universities in Malakand division*

Sr. no	University name	Male	Female	Total number
1	University of Malakand	1132	728	1860
2	University of swat	1128	602	1730
3	Shaheed Benazir Bhutto university sheringale	942	654	1596
4	University of bunir	928	547	1475
5	Total number of students	4130	2531	6661

The above table 3.1 shows the total numbers of male and female students of public sector universities of Malakand division.

### **3.4 Sampling technique**

The significant aim of sampling is to select the respondent from which the researcher is interested to obtain data. In most research where population is large in size and it is difficult for the researcher to obtain data from the overall population. Therefore, keeping in view the nature and large population size, the researcher adopted a proportionate stratified sampling technique for data collection for this study. Whenever a stratified population is adopted, the population is divided into strata. Considering the aim of this study. The population of this study has consisted of two major groups (male & female). The significant aim of the proportionate stratified sampling technique is to give an equal share to each stratum.

### 3.5 Sample

For the selection of the sample, both male and female students at public sector universities of Malakand division were taken as two strata. The sample was selected from the social science and management science faculty of Malakand division universities. According to Morgan's table if the population is beyond 6000 then 361 is considered as the perfect sample size. Keeping in view this point researcher selected 361 students as a sample of this study. Each stratum consisted of an equal number of students.

Table 3.2

#### *Sample of the study*

Sr. No	Group	Population N	Sample n	Rate of return
1	Male	4130	224	199
2	Female	2531	137	128
3	Total number	6661	361	327

### 3.6 Instrumentation

For the collection of data, the researcher used an adapted questionnaire as a tool in this study. The instrument was based on the theoretical framework by Adeniyi, Derera, and Gamede (2022). Researcher found a standardized tool regarding entrepreneurial readiness in the Pakistani context. The tool consisted of 29 total items. Furthermore, the questionnaire was split into two major parts to avoid uncertainty. Firstly, demographic information of participants such as gender, age, university, faculty, and department were added to the questionnaire. The second part was comprised of entrepreneurial readiness

variables which were considered 29 questionnaire items by following a five-point Likert scale that ranged from 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree. Directions were given at the start of every section of the tool and the researcher also made sure respondents regarding their privacy and anonymity. Moreover, the researcher had emailed the concerned person to grant permission to adapt the tool of the research, and researcher got the permission to use the tool in the current study.

### **3.6.1 Demographic information**

Demographic information of public sector universities students of Malakand division were obtained to collect personal information of the respondents. Items related demographic information was based on gender, age, university, faculty, and department.

### **3.6.2 Entrepreneurial readiness**

This part was based on entrepreneurial readiness questionnaire. Total 30 items were there in questionnaire and each variable had 10, 5, 5, 5, and 5 items. Detail of the items were given in table 3.3 below:

Table 3.3

*Description of entrepreneurial readiness scale*

Sr. No.	Dimension	Items	Number of items
1	Entrepreneurial readiness	ER1, ER2, ER3, ER4, ER5, ER6, ER7, ER8, ER9, ER10	10
2	Searching	S1, S2, S3, S4, S5	5
3	Planning	P1, P2, P3, P4, P5	5
4	Marshaling	M1, M2, M3, M4, M5	5
5	Implementing	I1, I2, I3, I4, I5	5

The table showed the details of entrepreneurial readiness questionnaire items consisted of 35 items which focused on the dimension of theoretical framework.

**3.6.3 Validity of the tool**

Researcher adapted a questionnaire for the study. For validity purpose of the tool, the researcher consulted three professionals from field of Education for the sake of validity of Entrepreneurial Readiness. Professional observed the instrument on the basis of objectives, titles of the research and theoretical framework of the study. Expert provided valuable comments and suggested changes for perfection of the tool. Questionnaire was amended accordingly, and rearranged and ready for data collection.

### **3.6.4 Pilot testing**

The researcher selected sample of 100 students from the population consisted of both male and female for pilot testing. Researcher personally visited each university to gathered data. The researcher approached students distributed questionnaire and asked students to select from five-point Likert scale. The respondents were guaranteed that data they given were only utilize for research objectives. SPSS were used for the analysis of data.

### **3.6.5 Reliability of instruments**

Later on, pilot testing, the collected data were put in SPSS version 22 for analysis. In order to obtain desired results, the data were interpreted in tabular form to assess the strength of the tool and as well as improved items for final version of the questionnaire. All items were coded for this study. For this purpose, Item-total correlation, Cronbach alpha were calculated by the researcher.

Table 3.4

*Cronbach Alpha Reliability of Entrepreneurial Readiness Scale Pilot testing (No of students= 89, Male= 46, Female= 43)*

Scale	Major Dimension	Items	Cronbach Alpha reliability
Entrepreneurial readiness		30	.759
	Entrepreneurial readiness	10	.634
	Searching	5	.682
	Planning	5	.688
	Marshaling	5	.730
	Implementing	5	.677

Table 3.5 indicated the reliability of the “Entrepreneurial Readiness Scale”. Overall Cronbach Alpha was .759. While the major dimension’s reliability of “Entrepreneurial Readiness” “Searching” “Planning” “Marshaling” and “Implementing” were .634, .682, .688, .730, .677 correspondingly.

Table 3.5

*Item-total correlation of Entrepreneurial Readiness scale pilot testing (No of students=89)*

Codes of Items	R	Codes of Items	R	Codes of Items	R
ER1	.267*	S1	.348**	M1	.400**
ER2	.281**	S2	.261*	M2	.538**
ER3	.345**	S3	.373**	M3	.356**
ER4	.266*	S4	.447**	M4	.363**
ER5	.369**	S5	.347**	M5	.499**
ER6	.452**	P1	.492**	I1	.317**
ER7	.260*	P2	.238*	I2	.268*
ER8	.361**	P3	.356*	I3	.299**
ER9	.418**	P4	.467**	I4	.258*
ER10	.175	P5	.280**	15	.516**

The above table 3.6 showed Entrepreneurial Readiness Scale Item-total correlation. The highest Item-total correlation was of item No. M2 (.538) and the lowest Item-total correlation was of item No. ER10 (.175).



Table 3.7

*Intersection correlation of Entrepreneurial Readiness Scale pilot testing (No of students=89)*

	Entrepreneurial Readiness	Searching	Planning	Marshaling	Implementing	Entrepreneurial Readiness Scale
Entrepreneurial Readiness	1					
Searching	.144	1				
Planning	.243*	.435**	1			
Marshaling	.233*	.464**	.469**	1		
Implementing	.133	.420**	.314**	.449**	1	
Entrepreneurial Readiness Scale	.633**	.652**	.681**	.732**	.622**	1

\*Correlation is significant at the 0.01 level (2-tailed).

\*\*Correlation is significant at the 0.01 level (2-tailed).

Table 3.7 shows the Entrepreneurial Readiness Scale intersection correlation. Highest intersection correlation was found among the Marshaling and Entrepreneurial Readiness Scale (.732\*\*) on the other hand the lowest intersection correlation was found among Implementing and Entrepreneurial Readiness (.133).

#### **3.6.5.1 Final version of the tool**

After pilot testing and applying statistical tests the total item analysis showed that the value of ER10 is low, so it was omitted. The final tool of the study was consisting of 29 total items after omitted one statement from the questionnaire.

### **3.7 Data collection**

In the research process data collection plays a significant role. Data were collected through a questionnaire. The researcher personally visited all universities to approach respondents individually. The researcher sought permission from the head of the department to allow the researcher to obtain required data. The questionnaire was given to each respondent and each respondent was requested to fill out a questionnaire to obtain desired data for this study.

### **3.8 Data analysis**

Questionnaire was used to collect data for this study and analyzed with the help of SPSS version 22. The researcher applied Mean and t test for data analysis to obtain the desired results. The below table 3.7 showed the detailed description of data analysis:

Table 3.7

*Description of objectives, hypothesis, and statistical test*

Sr. No.	Objectives	Hypothesis	Statistical test
1	To assess student's entrepreneurial readiness at higher education level		Mean
2	To compare students' entrepreneurial readiness on gender base at higher education level	H <sub>01</sub> : There is no significant difference among students on gender towards entrepreneurial readiness at higher education level.	T test
2a	To compare students' searching on gender base at higher education level	H <sub>01a</sub> : There is no significant difference among students on gender base towards searching at higher education level.	T test
2b	To compare students' planning on gender base at higher education level	H <sub>01b</sub> : There is no significant difference among students on gender base towards planning at higher education level.	T test
2c	To compare students' marshalling on gender base at higher education level	H <sub>01c</sub> : There is no significant difference among students on gender base towards marshalling at higher education level.	T test
2d	To compare students' implementing on gender base at higher education level	H <sub>01d</sub> : There is no significant difference among students on gender base towards implementing at higher education level.	T test

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3	To compare students' entrepreneurial readiness on the base of faculty at higher education level	H <sub>0</sub> 2: There is no significant difference among students on basis of faculty towards entrepreneurial readiness at higher education level	T test
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### 3.9 Ethical consideration

While making interaction with public and their data, ideal practice in research include ethical consideration. Researcher must be aware of ethical consideration involved in data collection process. Researcher ought to be polite and honest while making interaction with the participant of the research. Some of the ethical considerations were followed in this study. They consist of the following:

- This present study was based on entrepreneurial readiness comparison among university students based on gender. The participant's name was not mentioned in the questionnaire and accurate paragraph was mentioned about it that researcher obtain this information for just research purpose.
- None of the respondents were pressured or pushed to participate in this study.
- The data presented in this study was self-reported data by participants and were not manipulated or invented.

### **3.10 Delimitation**

This study was delimited to:

1. All public sector universities located in Malakand Division.
2. Students of homogeneous departments of Faculty of Social Sciences and the Faculty of Management Sciences.
3. All undergraduate students were included in this study.

## **CHAPTER 4**

### **DATA ANALYSIS AND INTERPRETATION**

#### **Introduction**

During this chapter, the researcher looked over detailed analysis and interpretation of research data. This chapter displayed the taken data in tabular form. Statistically different variables were evaluated. A thorough interpretation of data interpretation of data was described. The chapter was divided into three parts. The first part of this chapter lay emphasize on the demographic variables of this study gathered by the researcher throughout the data collection phase. The second part lay emphasize on analysis of data according to the objectives of this study “To assess student’s entrepreneurial readiness at higher education level” for this mean score was used to measured students Entrepreneurial Readiness. The third part was consisted of second objective of this study which was “To compare students’ entrepreneurial readiness on gender base at higher education level” for comparison among male and female students, an independent t test was applied to gather the required data. After all, tables were created, and results were drawn.

## Section 1

**Demographic information**

Table 4.1

*Distribution of sample on gender base*

Gender	Frequencies	Percentage
Male	199	61%
Female	128	39%
Total	327	100%

The above 4.1 table shown that the present study sample was consisted of 199(61%) male students and 128(39%) female students enrolled in public sector universities of Malakand division.

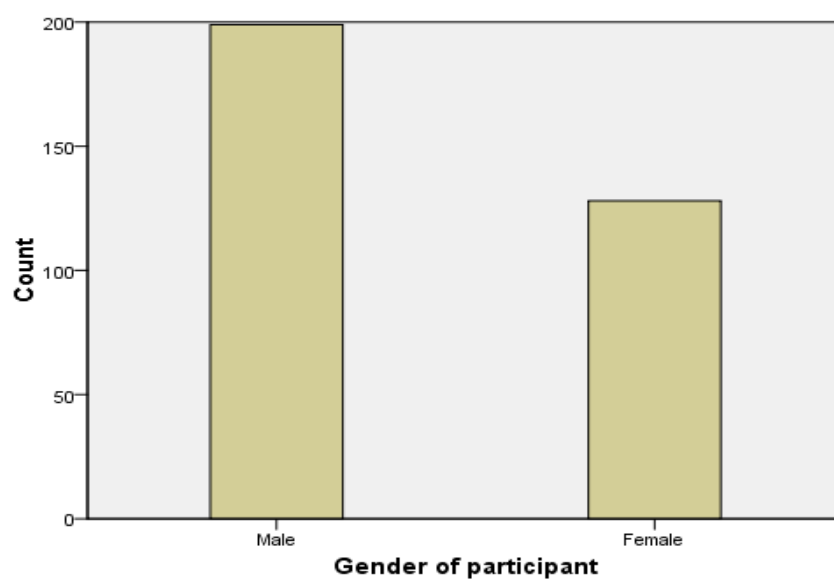
*Fig 4.1*

Table 4.2

*Distribution of sample the on basis of age*

Age	Frequencies	Percentage
18-20	34	10%
21-23	195	60%
24-26	95	29%
27-Above	3	1%
Total	327	100%

Table 4.2 shown that age of sample in this presented study was 18-20 34(10%), 21-23 was 195(60%), 24-26 was 95(29%), and 27-Above was 3(1%) of students studying in Malakand division universities.

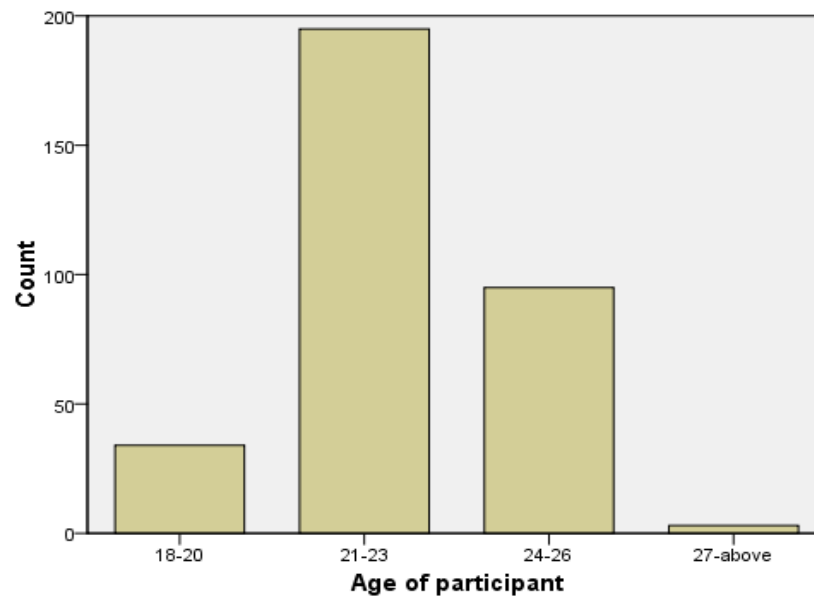
*Fig 4.2*



Table 4.3

*Distribution of sample on basis of university*

University	Frequencies	Percentage
University of Swat	89	27%
University of Malakand	85	26%
Shaheed Benazir Bhutto University Sheringale	81	25%
University of Bunir	72	22%
Total	327	100%

The above table 4.3 shown university wise distribution of the sample which University of Swat was 89(27%), University of Malakand was 85(26%), Shaheed Benazir Bhutto University Sheringale was 81(25%), and University of Bunir was 72(22%) of students studying at public sector universities of Malakand division.

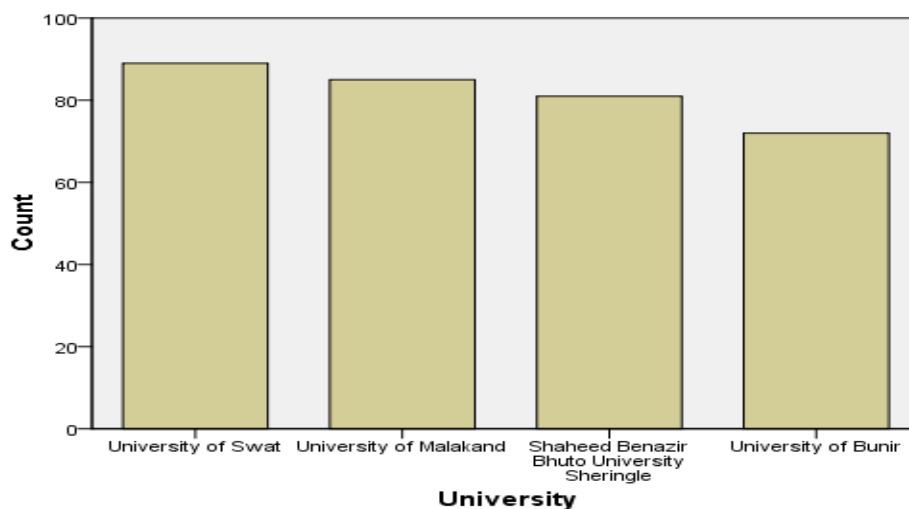
*Fig 4.3*

Table 4.4

*Distribution of sample on basis of faculty*

Faculty	Frequencies	Percentage
Social Sciences	238	73%
Management Science	89	27%
Total	327	100%

The above table 4.4 shown the faculty wise distribution of sample. Social Science students were 238(73%) and Management Sciences were 89(27%) enrolled in public sector universities located in Malakand division.

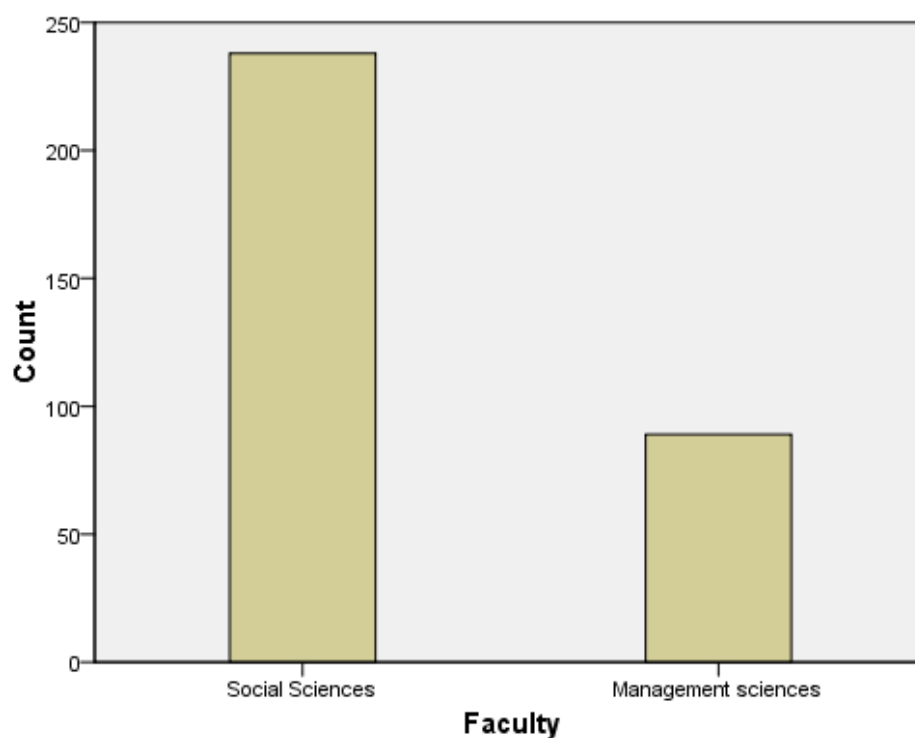
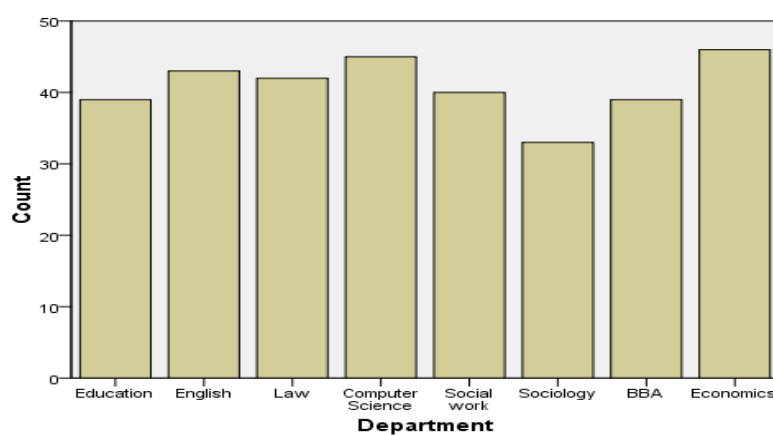
*Fig 4.4*

Table 4.5

*Department wise distribution of sample*

Department	Frequencies	Percentage
Education	39	12%
English	43	13%
Law	42	13%
Computer science	45	14%
Social work	40	12%
Sociology	33	10%
BBA	39	12%
Economics	46	14%
Total	327	100%

The above table 4.5 shown department wise distribution of sample which was Education 39(12%), English was 43(13%), Law was 42(13%), Computer Science was 45(14%), Social work was 40(12%), Sociology was 33(10%), BBA was 39(12%), Economics was 46(14%) students enrolled in public sector universities in Malakand division.

*Fig 4.5 Department wise distribution of sample*

## Section II

**Assess students Entrepreneurial Readiness**

Objective 1: To assess student's Entrepreneurial Readiness at higher education level.

Table 4.6

*Level of students Entrepreneurial Readiness*

Variables	n	Mean	Remarks
Entrepreneurial Readiness	327	3.64	Agree
Searching	327	3.74	Agree
Planning	327	3.70	Agree
Marshalling	327	3.62	Agree
Implementing	327	3.65	Agree
Overall entrepreneurial readiness of students	327	3.68	Agree

Table no. 4.6 shows the mean score of students' Entrepreneurial Readiness. The mean score values ranged from 3.62 to 3.74. The mean score of entrepreneurial readiness was 3.64, which indicates that students agreed with entrepreneurial readiness. The mean value of searching was 3.74, which indicates that students agreed with Searching. The mean value of planning was 3.70, which indicates that students agreed with planning. The mean value of marshaling was 3.62, which indicates that students agreed with marshaling. The mean value of implementing was 3.65, which indicates that students agreed with implementing. The overall mean value for entrepreneurial readiness was 3.68, which

indicates that students agreed to all statements of the Entrepreneurial Readiness. The highest mean score was for searching 3.74 and the lowest score was for marshaling 3.62.

## Part III

**comparison of gender**

Objective No. 2: To compare students Entrepreneurial Readiness on gender base at higher education level

H<sub>01</sub>: There is no significant difference among students on gender base towards Entrepreneurial Readiness at higher education level.

Table 4.7

*Gender-wise comparison of Entrepreneurial Readiness*

Variable	Group	n	Mean	t value	df	Sig.
Entrepreneurial Readiness	Male	199	3.69	1.754	325	.05
	Female	128	3.56			

\*p<0.05

Table 4.7 showed comparison entrepreneurial readiness based on gender. The t-value (1.754) was significant at the level of .05 which was equal to (0.05) p-value. Therefore, significant difference was in the mean score of males (3.69) and of female (3.56) students. It showed that male students had more entrepreneurial readiness as compared to female students. Therefore, the hypothesis that there is no significant difference among students on gender base towards entrepreneurial readiness at higher education level is rejected.

Objective No.2a: To compare students Searching on gender base at higher education level

H<sub>0</sub>1a: There is no significant difference among students on gender base towards Searching at higher education level.

Table 4.8

*Gender wise comparison of Searching*

Variable	Group	n	Mean	t-value	df	Sig.
Searching	Male	199	3.76	.504	325	.447
	Female	128	3.72			

\*p<0.05

Table 4.8 shows a comparison of searching based on gender. The t-value (.504) was not significant at the level of .447 which was more than the (0.05) p-value. Therefore, no significant difference was found in the mean scores of male (3.76) and female (3.72) students. It showed that male and female students had the same entrepreneurial readiness towards searching. Therefore, the hypothesis that there is no significant difference among students on gender base towards searching at higher education level is accepted.

Objective No.2b: To compare students Planning on gender base at higher education level

H<sub>0</sub>1b: There is no significant difference among students on gender base towards Planning at higher education level.

Table 4.9

*Gender-wise Comparison of Planning*

Variable	Group	n	Mean	t value	df	Sig.
Planning	Male	199	3.73	1.109	325	.019
	Female	128	3.65			

\*p<0.05

Table 4.9 shows a comparison of planning on gender based. The t-value (1.109) was significant at the level of .019, which was less than the (0.05) p value. Therefore, there was a significant difference in the mean score of males (3.73) and female (3.65) students. It showed that male students showed more Entrepreneurial Readiness about planning as compared to female students. Therefore, there is no significant difference among students on gender base towards planning at higher education level. H<sub>0</sub>1c is rejected.



Objective No.2c: To compare students Marshalling on gender base at higher education level

H<sub>0</sub>1c: There is no significant difference among students on gender base towards Marshalling at higher education level.

Table 4.10

*Gender-wise comparison of Marshalling*

Variable	Group	n	Mean	t-value	df	Sig.
Marshaling	Male	199	3.60	-.798	325	.105
	Female	128	3.66			

\*p<0.05

Table 4.10 shows comparison of marshalling on gender based. The t-value (-.798) was not significant at the level 0.105, which was more than the (0.05) p value. Therefore, no significant difference was in the mean score of males (3.60) and female (3.66) students. It showed that male and female students had the same entrepreneurial readiness toward marshaling. Therefore, the hypothesis that there is no significant difference among students on gender base towards marshaling at higher education level is accepted.

Objective No.2d: To compare students Implementing on gender base at higher education level

H<sub>0</sub>1d: There is no significant difference among students on gender base towards Implementing at higher education level.

Table 4.11

*Gender-wise comparison of Implementing*

Variable	Group	n	Mean	t-value	df	Sig.
Implementing	Male	199	3.67	.843	325	.154
	Female	128	3.61			

\*p<0.05

Table 4.11 showed comparison of implementing on gender based. The t-value (.843) was not significant at the level of .154 which was more than (0.05) p value. Therefore, no significant difference was in the mean score of males (3.67) and of female (3.61) students. It showed that male and female students had the same entrepreneurial readiness towards implementing. Therefore, the hypothesis that there is no significant difference among students on gender base towards entrepreneurial readiness at higher education level is accepted.

Objective No. 3: To compare student's entrepreneurial readiness on faculty base at higher education level

H<sub>02</sub>: There is no significant difference among students on faculty base towards Entrepreneurial Readiness at higher education level.

Table 4.12

*Faculty-wise comparison of entrepreneurial readiness*

Variable	Group	n	Mean	t-value	df	Sig.
Faculty	Social Sciences	238	3.69	1.461	325	.474
	Management sciences	89	3.60			

\*p<0.05

Table 4.12 shows a comparison of entrepreneurial readiness based on faculty. The t-value (1.461) was not significant at the level of .474 which was more than the (0.05) p-value. The mean score of students of the faculty of social sciences was (3.69) and the mean score of the faculty of management sciences was (3.60). There was no significant difference found in the mean scores of the students of both faculties of social sciences and management sciences. So, the hypothesis that there is no significant difference among students on faculty base towards entrepreneurial readiness at the higher education level is accepted.

## **CHAPTER 5**

### **SUMMARY, FINDINGS, DISCUSSION, CONCLUSION, AND RECOMMENDATION**

#### **5.1 Summary**

The present study was based on entrepreneurial readiness of students on gender-based at higher education level. This study was based on one variable and had 5 sub-variables. The major objectives of this study were: To assess students' entrepreneurial readiness at higher education level. To compare student's entrepreneurial readiness on gender base at higher education level. To compare students' entrepreneurial readiness based on faculty at higher education level. The main null hypothesis was:  $H_01$ : There is no significant difference among students on gender base towards entrepreneurial readiness at higher education level.  $H_02$ : There is no significant difference among students based on faculty at higher education level.

The theoretical framework of the present study was grounded on entrepreneurial readiness of students which was given by Adeniyi, Derera, and Gamede (2023). Entrepreneurial readiness model based on five sub dimensions i.e. Entrepreneurial readiness, searching, planning, marshalling, and implementing.

Quantitative research approach and descriptive comparison design was used for this study. The population of this was all graduating students of public sector universities of Malakand. Male and female both students comprised population of the study. Data were mainly collected from four universities. Stratified random sampling technique was adopted to select sample because stratified sampling comprises the strata and population as based on two groups such as male and female. The sample of this study according to Morgan

table and sample was 361 students. Researcher adapted questionnaire as tool for data collection. It was based on five variables and had 29 total items. Tool was split into two parts such as demographic information and questionnaire items relevant to the variables.

Researcher contacted three specialists in the subject of Education for tool validity and made suggested changes as they suggested. Researcher distributed questionnaire to 100 students in which 89 were returned. Collected data were entered into SPSS to find out reliability of the tool. The reliability of entrepreneurial readiness tool was (.761). After reliability researcher made changes in the tool for final data. The researcher collected final data through personally visiting each university to collect data. From total 361 only 327 respondents returned the questionnaire. Researcher enter collected data into SPSS for data analysis and applied two tests. i.e., Mean and t test.

## **5.2 Findings**

The findings of this study were explained step by step below:

### **1. Assess student's Entrepreneurial Readiness**

According to objective number first “To assess student’s entrepreneurial readiness at higher education level”

Collected data for this objective indicated student’s entrepreneurial readiness. It was found that Mean score of entrepreneurial readiness (3.64), searching (3.74), planning (3.70), marshalling (3.62), interpreting (3.65), and the overall student’s entrepreneurial readiness was (3.68). Total Mean of students Entrepreneurial Readiness indicated that students are falls in agreed. Furthermore, the result shows that students also agreed to

entrepreneurial readiness, searching, planning, marshalling, and implementing. The result shows that students have positive about entrepreneurial readiness (table 4.6).

## **2. Comparison of male and female student's entrepreneurial readiness**

The second objective of the study was “To compare students' Entrepreneurial Readiness on gender based at higher education level”.

The result found that the t-value of male and female students regarding entrepreneurial readiness ( $t=1.754$ ,  $p=.050$ ) which is equal to significance level. The result found that there was a significant difference between male and female students regarding entrepreneurial readiness. Male students at university were having high mean score (3.69) as compared to female students (3.56). therefore, the result shows that there was a significant difference among student's entrepreneurial readiness, so  $H_01$  is rejected (table 4.7).

### **2.1 comparison of students searching based on gender**

Objective 2a of the study was “To compare students searching on gender base at higher education level”.

The result shows that there was no statistical difference found in the mean score of the male and female students regarding searching ( $t=.504$ ,  $p=.447$ ) which is higher than 0.05 significance level. Male students at university level were having mean score (3.76) and female students were having mean score (3.72). Therefore,  $H_{01a}$  is accepted (table 4.8).

## **2.2 comparison of students planning based on gender**

Objective 2b of the study was “To compare students planning on gender base at higher education level”.

The result shows that there was statistical difference found in the mean score of male and female students regarding planning ( $t= 1.109$ ,  $p=.019$ ) which is less than 0.50 significance level. Male students at university were having high mean score (3.73) as compared to female students (3.65). therefore,  $H_{01b}$  is rejected (table 4.9).

## **2.3 comparison of students marshalling based on gender**

Objective 2c of the study was “To compare students marshalling on gender base at higher education level”.

The result of the study shows that there was no statistical difference found in the mean score of male and female students regarding marshaling ( $t=-.758$ ,  $p=.105$ ) which is higher than the 0.05 significance level. The male students at university were having mean score (3.60) as compared to female students (3.66) therefore,  $H_{01c}$  is accepted (table 4.10).

## **2.4 comparison of students implementing based on gender**

Objective 2d of the study was “To compare students implementing on gender base at higher education level”.

The result of the study shows that there was no statistical difference found in the mean score of male and female students regarding implementing ( $t=.843$ ,  $p=.154$ ) which is higher than the significance level. Male students at the university were having a mean score (3.67) as compared to female students (3.61). therefore,  $H_{01d}$  is accepted (table 4.11).

### **3. Comparison of student's entrepreneurial readiness based on faculty**

Third objective of the study was "To compare student's entrepreneurial readiness based on faculty at higher education level".

The result of the study shows that there was no statistical difference found in the mean score social science and management science regarding entrepreneurial readiness ( $t=1.461$ ,  $p=.474$ ) which is higher than significance level. Social science students were having a mean score (3.69) as compared to management sciences students (3.60). Therefore,  $H_{02}$  is accepted (table 4.12).

### **5.3 Discussion**

This present study was aimed to compare student's entrepreneurial readiness at higher education level with major two objectives and four sub-objectives. The 1<sup>st</sup> objective of the research was to assess student's entrepreneurial readiness at higher education level. It was found that student's entrepreneurial readiness was practicing on different averages. The mean value of searching variable was high as compared to other variables. It showed that searching variable was practicing more in student's entrepreneurial readiness.

According to Olushola (2021) beside marshalling other components such as searching, planning, and implementing having positive impact on student's entrepreneurial readiness. according to the study students were competent to recognized business opportunities, make a business plan, and some of them were able to start their own business. According to Pihie and Bagheri (2011) found that entrepreneurial self-efficacy is prominently associated with various elements of creating new products and identifying more market opportunities. Furthermore, Wenneberg et al., (2013) found that student's capability of taking venture risk encourage them towards successful entrepreneurship



entry. McGee et al., (2009) suggested that growing entrepreneurs seem significantly confident regarding going all stages such as searching, planning, marshalling, and implementing of entrepreneurship process than those who have not chased any entrepreneur's actions. Entrepreneurship education considerably impacts business searching, planning, marshalling, and implementing (Nowinski et al., 2019).

The 2<sup>nd</sup> main objective of this research was to compare student's entrepreneurial readiness on gender base at higher education level. The result of this study indicates that there was significant difference between male and female students on gender based. According to Ikhwan et al., (2020) indicated that male students has having high level of entrepreneurial readiness as compared to female students. Goel et al., (2015) it is found that less female rather than male is engage in various academic entrepreneurial activities, it indicates the less representation of females in entrepreneurship more specifically. Gender differences are present in opinions as well in performance, though males are report more confident beliefs compared to females in academic research commercialization (Miranda et al., 2017). According to Abreu & Grinevich, (2017) females in academia are in less amount rather than males to gain rights as primary inventors involve in partnership with private sector, or initiate startup businesses matching to their research.

The 2<sup>nd</sup> (a) objective of the study was to compare students searching on gender based at higher education level. The result found that there was no significant difference among students on gender based. According to McGee et al., (2009) a growing entrepreneurs sound more confident in their capability to search for entrepreneurial opportunities and utilize the required resources to achieve such opportunities. () Students entrepreneurial ability for opportunity recognition or coming with novel idea significantly

contribute to their entrepreneurial readiness for start-ups. Dahalan et al., (2013) found that searching for business opportunity significantly influence entrepreneurial readiness on gender based.

The **2<sup>nd</sup> (b)** objective was to compare students planning on gender based at higher education level. Results of this study found that there was significant difference among students. Male students were having more entrepreneurial planning as compared to female. Olugbola (2017) found that planning indicates a substantial connotation with entrepreneurial readiness. Nowinski et al., (2019) confirmed that venture planning is an important element for venture creation that need to be considered significant in entrepreneurship education.

The **2<sup>nd</sup> (c)** objective was to compare students marshalling on gender based at higher education level. According to the Results of the study it was found that there was no significant difference among students. According to Adeniyi et al., (2022) marshalling indicates no significant linked with entrepreneurial readiness. It emphasizes that students are lacking to gain financial and physical resources for venture creation. McGee et al., (2009) found that marshalling is more practical skill and need more attention due to day-to-day management of finance and staffs for business. Nwosu et al., (2013) found that limited financial support, human and managerial resources affect small medium enterprises among entrepreneurs in Nigeria.

The **2<sup>nd</sup> (d)** objective of the study was to compare students implementing on gender based at higher education level. The results of this study found that there was no significant difference found among students. According to Ganiyu & Adeniyi, (2020) found that in Africa there is significant difference among male and female students due to gender

inequality. Adeniyi et al., (2022) found that implementing showed positive association towards male student's entrepreneurial readiness, while female students' entrepreneurial readiness is impacted by implementing. Furthermore, the growth of venture center around entrepreneurs' decision-making, problem-solving, and competitive abilities. All the phases such as searching, planning, and marshaling depend upon implementing these skills for a successful business creation.

## **5.4 Conclusion**

The current study compares students' entrepreneurial readiness at higher education level. It was concluded that students agreed to entrepreneurial readiness, searching, planning, marshaling, and implementing. It was concluded that there was a significant difference between male and female students' entrepreneurial readiness at the university level. Male students were having high entrepreneurial readiness as compared to female students. It was also concluded that there was no significant difference between male and female students regarding searching. It was concluded that there was a significant difference between male and female students regarding planning. Male students at university level were having high entrepreneurial planning as compared to female students. It was also concluded that there was no significant difference between male and female students regarding marshaling at university level. It was concluded that there was no significant difference between male and female students regarding implementing at university level. Furthermore, it was also concluded that there was no significant difference between faculty of social sciences and management sciences students about entrepreneurial readiness at university level.

## 5.5 Recommendations

1. It is recommended that university administrations may introduce idea base exhibitions, and debates for students to enhance their entrepreneurial readiness skills such as marshaling and entrepreneurial readiness.
2. It is recommended that the universities may conduct mentorship sessions with potential investors and business specialists through business incubation centers to provide awareness about entrepreneurial readiness to all students specially to female students.
3. It recommended that multi-disciplinary debates may be arranged to address business planning, advertising business, selecting appropriate location and manage people according to their abilities specially encourage female participation in debates.
4. It is recommended that departmental heads may encourage continued collaboration to influence people to support student's business, provide donations for business, and motivate people to become business partners through business workshops.
5. It is recommended that university may provide business expo to encourage students to start business with limited resources, satisfy customer's needs, and to handle challenges that come across business.
6. It is recommended that business specialists may be hired for the counseling of university-level students to provide them guidance regarding entrepreneurship.
7. It is recommended that the university may arrange entrepreneurial activities such as changing business idea into business, owning business rather than working for other, search for funding agencies, and to use technology to create better version of business to satisfy societal needs.

## **5.6 Future research recommendations**

1. It is recommended that future researcher may incorporate some other variables such as socio-economic status, academic background, and cultural context.
2. It is recommended that in future research data may be collected through detailed interviews.
3. In future researcher may also do comparison of in public and private universities to check their entrepreneurial readiness.

Table 5.1

*Alignment table of objectives, findings, conclusion, and recommendations*

Objective	Finding	Conclusion	Recommendation
To assess student's entrepreneurial readiness at higher education level	Mean score values of searching, planning, and implementing were high than entrepreneurial readiness and marshalling.	It was concluded that all variables were practicing on different averages. The highest score was of searching as compared to other variables of entrepreneurial readiness such as planning, marshalling, and implementing.	It is recommended that universities administrative may introduce programs like exhibitions, funfair, debates to help students to enhance their entrepreneurial readiness skills such as marshalling and entrepreneurial readiness.
To compare students' entrepreneurial readiness on gender base at higher education level	There was statistic difference found in the mean score of male and female students regarding entrepreneurial readiness ( $t=1.754$ , $p=.050$ ). Male students at university level were having high mean score (3.69) as compared to female students (3.56).	It was concluded that there was significant difference between male and female students. Male students were having high entrepreneurial readiness as compared to female students.	It is recommended that business specialists may be hired for the counselling of university level students in order to provide guidance to female students regarding entrepreneurship.
To compare students' searching on gender base at higher education level	There was no statistic difference found in the mean score of male and female students regarding searching (.504,	It was concluded that there was no significant difference among male and female	It is recommended that entrepreneurship education may be provided to students to identify good

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	p=.447). Male students at university level were having mean score (3.76) and female students were having mean score (3.72).	Male students regarding searching.	business idea, come up with business plan to fulfil societal needs by providing novel products or services.
To compare students' planning on gender base at higher education level	There was a statistical difference found in the mean score of male and female students regarding planning (t=1.109, p=.019). Male students at university level were having high mean scores (3.73) as compared to female students (3.65).	It was concluded that there was a significant difference between male and female students regarding planning. Male students at university level were having high entrepreneurial planning as compared to female students.	It is recommended that multi-disciplinary debates may be arranged to address business planning, advertising business, selecting the appropriate location, and managing people according to their abilities especially encouraging female participation in debates.
To compare students' marshaling on gender base at higher education level	There was no statistical difference found in the mean score of male and female students regarding marshaling (t=-.758, p=.105). Male students at university level were having high mean score (3.73) as compare to female students (3.65).	It was concluded that there was no significant difference between males and females regarding marshaling at university level.	It is recommended that departmental heads may encourage continued collaboration to influence people to support students' businesses, provide donations for business, and motivate people to become business partners through business workshops.

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To compare students' implementing on gender base at higher education level	There was no statistic difference found in the mean score of male and female students regarding implementing (t=.843, p=.154). Male students at the university level were having high mean scores (3.67) as compared to female students (3.61).	It was concluded that there was no significant difference between male and female students regarding implementing at university level.	It was recommended that the university may provide a business expo to encourage students to start businesses with limited resources, satisfy customers' needs, and handle challenges that come across the business.
To compare students' entrepreneurial readiness based on faculty at higher education level	The result of the study shows that there was no statistical difference found in the mean score of social science and management science regarding entrepreneurial readiness (t=1.461, p=.474) which is higher than the significance level. Social science students had a mean score (3.69) as compared to management sciences students (3.60).	It was concluded that there was no significant difference among students of faculty of social sciences and management sciences about entrepreneurial readiness at university level.	It is recommended that the university may arrange entrepreneurial activities such as changing business idea into business, technical skill to run business, owning business rather than working for other, search for funding agencies, and to use technology to create better version of business to satisfy societal needs.

## 5.7 Limitation of the study

1. Due to limited time the researcher only collected data from public sector universities.
2. Researcher only delimited the study into social sciences and management sciences.



3. researcher only delimited the study into gender comparison.

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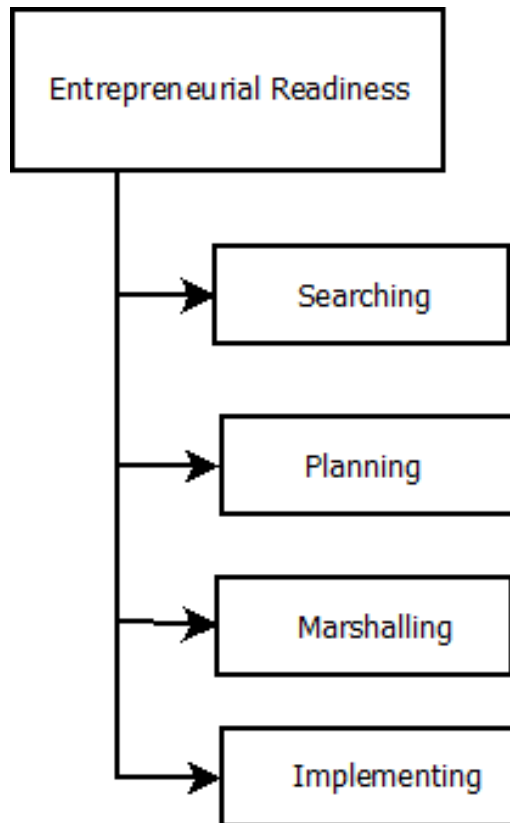
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# Appendices

## Appendix A

### Theoretical framework



## Appendix B

### Topic Approval



NATIONAL UNIVERSITY OF MODERN LANGUAGES  
FACULTY OF SOCIAL SCIENCES  
DEPARTMENT OF EDUCATIONAL SCIENCES

Dated: 26-06-2023

M.L.1-3/ES/2023/429

Name: Ghufran Khan Reg No. 41-M.Phil/Edu/S22

Subject: APPROVAL OF M.Phil THESIS TOPIC AND SUPERVISOR

1. Reference to Letter No, M.L.1-4/Edu/2021/429, dated 26-06-2021, the Competent Authority has approved the title/theme/Practical/Theoretical Implication and Supervisor in 16<sup>th</sup> BASR Meeting dated 21<sup>st</sup> June 2023 and the recommendations of Faculty Board of Studies vide its meeting held on 27<sup>th</sup> April 2023.

a. Supervisor's Name & Designation

Dr. Farkhanda Tabassum,  
Assistant Professor,  
Department of Educational Sciences NUML, Islamabad.

b. Topic of Thesis

Entrepreneurial Readiness at Higher Education Level: A Gender-based  
Comparative Study.

c. Theme: Education and Industry

d. Practical Application: Community Service / Commercialization

2. You may carry out research on the given topic under the guidance of your Supervisor and submit the thesis for further evaluation within the stipulated time by 30<sup>th</sup> June 2024 for further processing as per NUML MPhil Timeline. (Timeline Attached).

3. As per policy of NUML, all MPhil/PhD thesis are to be run on turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis run from own sources.

4. Thesis is to be prepared strictly on NUML's format which can be taken from MPhil/PhD Coordinator.

Dr. Waqar Shahid  
Head

Department of Educational Sciences

Distribution:

Mr. Ghufran Khan (M.Phil Scholar)

Dr. Farkhanda Tabassum (Thesis Supervisor)

## Appendix C

### Data collection reference letter



DEPARTMENT OF EDUCATIONAL SCIENCES  
FACULTY OF SOCIAL SCIENCES  
National University of Modern Languages  
Sector H-9, Islamabad  
Tel.No: 051-9265100 Ext: 2090

ML.1-3/2023-ES/483

Dated: 29/11/2023


#### **WHOM SO EVER IT MAY CONCERN**

Mr. Ghufuran Khan, Student of MPhil Education Department of Educational Sciences  
National University of Modern Languages Islamabad thesis Title "**Entrepreneurial Readiness  
at Higher Education Level: A Gender-based Comparative Study**" under supervision of Dr  
Farkhanda Tabassum is engaged in project of Research Work.

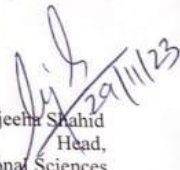
He may please be allowed to visit following Institutions to obtain the required information  
for his Research Work:

- n. University of Malakand
- o. University of Swat
- p. Shaheed Benazir Bhutto University Sheringale
- q. University of Buner.

This information shall not be divulged to any unauthorized person or agency. It shall be  
kept confidential.

  
Dr Farkhanda Tabassum  
Assistant Professor  
Supervisor  
Email: ftabassum@numl.edu.pk



  
Dr Wajeem Shahid  
Head,  
Department of Educational Sciences

## Appendix D

### Cover letter for validity certificate

#### Letter for request for tool validation

#### Entrepreneurial readiness at higher education level: A gender-based comparative study



**Subject: Request for validity**

Respected Madam/Sir,

I Ghufuran Khan MPhil scholar at from department of Educational sciences is currently working on my research entitled: (Entrepreneurial readiness at higher education level: A gender-based comparative study). Questionnaire as instrument as tool will be used in the said research. In view with this, the researcher requests you use your expertise to validate the attached adapted questionnaire. Knowing your experience in the field of research and education, I request you to please help me in validating the said instrument before administering it to the participants of the study.

I have attached validation sheet along with the questionnaire. I will be thankful to hear your suggestions and comments for the improvement of the instrument.

I am looking forward that my request would merit your positive responses. Your positive response is highly appreciated.

Thank you.

Ghufuran Khan

MPhil scholar, Department of Educational sciences

National University of Modern Languages,

Islamabad.

## Appendix E

### Sample of validity certificate

#### Certificate of validity



#### **Entrepreneurial readiness at higher education level: A gender-based comparative study**

By: Ghufraan Khan

MPhil Scholar, Department of educational sciences, Faculty of Social sciences

National University of Modern Languages, H-9, Islamabad, Pakistan.

It is hereby certified that the tool adapted by the scholar towards his thesis has been assessed by me and I found it to have been designed adequately for data collection for students at higher education level.

It is considered that the research instrument, adapted for the above mentioned title, is according to the objectives of the research, assured adequate face and content validity according to the purpose of the research, and it may be used for data collection by the researcher with fair amount of confidence.

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Institution: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix F

### List of expert's committee for tool validation

Expert name	Designation	Institute name	Date
Dr. Jameela Ashraf	Assistant Professor	NUML	27-09-2023
Dr. Aisha Bibi	Assistant Professor	NUML	05-10-2023
Dr. Iqbal Amin	Lecturer	University of Malakand	12-10-2023
Khan			



## Appendix G

### Research Instrument validation certificates

#### Certificate of validity



#### Entrepreneurial readiness at higher education level: A gender-based comparative study

By: Ghufuran Khan

MPhil Scholar, Department of educational sciences, Faculty of Social sciences

National University of Modern Languages, H-9, Islamabad, Pakistan.

It is hereby certified that the tool adapted by the scholar towards his thesis has been assessed by me and I found it to have been designed adequately for data collection for students at higher education level.

It is considered that the research instrument, adapted for the above mentioned title, is according to the objectives of the research, assured adequate face and content validity according to the purpose of the research, and it may be used for data collection by the researcher with fair amount of confidence.

Name: Dr. Jameela Ashraf  
Designation: Assistant Professor  
Institution: NUML  
Signature: [Signature]  
Date: 27-09-2023

Certificate of validity



**Entrepreneurial readiness at higher education level: A gender-based comparative study**

By: Ghufan Khan

MPhil Scholar, Department of educational sciences, Faculty of Social sciences  
National University of Modern Languages, H-9, Islamabad, Pakistan.

It is hereby certified that the tool adapted by the scholar towards his thesis has been assessed by me and I found it to have been designed adequately for data collection for students at higher education level.

It is considered that the research instrument, adapted for the above mentioned title, is according to the objectives of the research, assured adequate face and content validity according to the purpose of the research, and it may be used for data collection by the researcher with fair amount of confidence.

Name: Dr. Aisha Bibi  
Designation: Assistant Professor  
Institution: NUML, Islamabad.  
Signature: [Signature]  
Date: 05.10.2023

Certificate of validity



**Entrepreneurial readiness at higher education level: A gender-based comparative study**

By: Ghufra Khan

MPhil Scholar, Department of educational sciences, Faculty of Social sciences

National University of Modern Languages, H-9, Islamabad, Pakistan.

It is hereby certified that the tool adapted by the scholar towards his thesis has been assessed by me and I found it to have been designed adequately for data collection for students at higher education level.

It is considered that the research instrument, adapted for the above mentioned title, is according to the objectives of the research, assured adequate face and content validity according to the purpose of the research, and it may be used for data collection by the researcher with fair amount of confidence.

Name: Dr. Iqbal Amin Khan

Designation: Lecturer

Institution: University of Malakand

Signature: [Signature]

Date: 12/10/2023

## Appendix H

### List of universities included in population

Sr. no	University name	Male	Female	Total number
1	University of Malakand	1132	728	1860
2	University of swat	1128	602	1730
3	Shaheed Benazir Bhutto university sheringale	942	654	1596
4	University of bunir	928	547	1475
5	Total number of students	4130	2531	6661

# Appendix I

## Research Instrument

Please provide all the demographic information and answer all the questions as best you can on the scale from 1 to 5, with 1 being Strongly Disagree, 2 Disagree, 3 Undecided, 4 Agree and 5 Strongly Agree.

### Demographic information

**1. Gender:**

1. Male

☐

2. Female

☐

**2. Age (Years):**

1. 18-20	2. 21-23	3. 24-26	4. 27-above
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**3. University:**

1. University of Swat	2. University of Malakand	3. Shaheed Benazir Bhutto University Sheringale	4. University of Bunir
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**4. Faculty**

1. Faculty of Social Science	2. Faculty of Management Science
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**5. Departments:**

Education  
Social work

English  
Sociology

Law  
BBA

Computer science  
Economics

Sr. No.	code	Statements	SD	D	UD	A	SA
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**Entrepreneurial readiness**

Entrepreneurial readiness refers to person intellectual qualities of ability and readiness to initiate entrepreneurial actions such searching, planning, marshalling, and implementing.

1	ER1	I am confident that I have the ability to convert my unique idea into business.					
2	ER2	I believe I have the required technical skills needed to run a business in the 21st century.					
3	ER3	I can use technology to create a better version to satisfy peoples' needs.					
4	ER4	I am able to start a new business by developing a product to meet peoples' demands.					
5	ER5	I prefer to own a business rather than working for other people.					
6	ER6	I believe that I have the skills to establish business opportunity in any country.					
7	ER7	I am able to run business through social media platforms.					
8	ER8	I am able to search for funding agencies to sustain a business beyond 5 years.					
9	ER9	I am prepared to start a business of my own.					
<b>Searching</b>							
It refers to how a unique idea is conceived, and identification of market opportunities.							
10	S1	I have the ability to identify a good business opportunity in my living vicinity.					
11	S2	I can identify the need for new business plan.					
12	S3	I have the ability to identify new services in order to satisfy societal needs.					
13	S4	I can come up with a new idea for business outcomes.					
14	S5	I am confident that I have the ability to identify business opportunity to fulfil local people need.					
<b>Planning</b>							
It refers to how a unique idea can be changed into business plan or proposal.							

15	P1	I am confident that I can plan my idea for business.					
16	P2	I can design an effective marketing/advertising strategy for a new product or service.					
17	P3	I can determine the right location for my business idea.					
18	P4	I am able to manage different people to achieve my goal.					
19	P5	I have the ability to clearly explain my business plan in written.					
<b>Marshalling</b>  It refers to raising funds to start the business, convincing other people to invest in one's business idea and to team up with the business, and connecting with customers and suppliers.							
20	M1	I have the ability to influence people to believe in my new business.					
21	M2	I have the ability to search donors to start a business.					
22	M3	I am confident that I can convince people to make financial contributions towards starting my business.					
23	M4	I am confident that I have the ability to motivate people to become partner with me.					
24	M5	I have the ability to convince people to support my business.					
<b>Implementing</b>  The implementing phase is about effectively managing and growing the business.							
25	I1	I have the ability to start a small business with limited resources.					
26	I2	I am confident that I have the ability to manage my financial resources.					

27	I3	I am confident that I can satisfy my customers by addressing their needs.					
28	I4	I am confident that I have the ability to use new technology that will make my business competitive.					
29	I5	I can face challenges which come across in my business.					

Thanks for your participation!

STAY BLESSED



**Annexure J**  
**Proofreading certificate**

Certificate of proofreading



**Entrepreneurial Readiness at Higher Education Level: A Gender-based  
Comparative Study**

By

**Ghufran Khan**

**National University of Modern Languages, Islamabad**

It is certified that the research work titled "Entrepreneurial Readiness at Higher Education Level: A Gender-based Comparative Study" conducted by Ghufran Khan has been checked and proofread for language and grammatical mistakes.

Name: Dr. Asghar Ali  
Designation: Assistant Professor  
Institution: Uni of Malakand  
Signature: [Signature]  
Date: 09/05/2024

## Appendix K

### Turnitin Report



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Dated: March 22, 2024

Faculty of Social Sciences

Subject: Turnitin Similarity Test Report of MPhil Thesis of Mr Ghufuran Khan  
(Educational Sciences) 1<sup>st</sup> Attempt


This is to state that MPhil thesis of Mr Ghufuran Khan has been run through Turnitin software on March 22, 2024. Paper ID is 2327714755 and similarity index is 06%. This is within the prescribed limit of Higher Education Commission.

The subject Turnitin similarity test report is attached for further processing, please.


Dean/FSS

  
25/03/2024



  
**Dr. Khushbakht Hina**  
Director  
Quality Enhancement Cell

HOD Edu. Sciences:

Dr. Janale to disseminate pl.  
  
27/3/24