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**THE IMPACT OF ENTREPRENEURSHIP EDUCATIONAL  
PROGRAMS:  
CASE STUDY OF PAKISTAN STUDENTS'  
ENTREPRENEURIAL INTENTIONS AND OPPORTUNITY  
RECOGNITION**

Master's thesis

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I have written this master's thesis independently. All viewpoints of other authors, literary sources and data from elsewhere used for writing this paper have been referenced.

**Abstract** - This study investigates the impact of entrepreneurship educational programs on students' entrepreneurial intentions and opportunity recognition, mainly focusing on the context of Lahore University of Management Sciences (LUMS) in Pakistan. The study explores the perceptions and experiences of students enrolled in entrepreneurship courses at LUMS. A methodology based on the qualitative approach of content analysis. The findings reveal several key patterns: a preference for practical learning over theoretical discussions, a desire for more focused and applied knowledge, and an emphasis on soft skills development. Despite these positive aspects, empirical results demonstrate a nominal relationship between the variables involved, indicating the limited effectiveness of the educational programs in fostering entrepreneurial intentions and opportunity recognition among LUMS students. This research underscores the need for further refinement of entrepreneurship education curricula to better align with the specific needs and challenges of students in the Pakistani context, ultimately enhancing their capacity to engage effectively in entrepreneurial endeavors.

**Key-words:** entrepreneurship education, opportunity recognition, entrepreneurial intentions, entrepreneurship programs, Pakistan

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## 1. INTRODUCTION

On the global landscape, entrepreneurship educational programs (EEP) have been considered as a key driver to foster innovation by skill development, opportunity recognition, and social cohesion. Thereby, largely associated with economic growth by the policy makers (Jardim & Pinho, 2021). Over the past two decades, the entrepreneurship education program (EEP) has observed exponential growth globally. Therefore, the phenomena of economic growth have now been highly marked by the potential development of an entrepreneurship culture in the country (Erikson et al., 2003).

Nevertheless, there has been great debate in literature discussing entrepreneurship intention as a predictor of planned behavior, helping entrepreneurs to see opportunities through the lens provided by carefully targeted training. (Krueger, Reithy & Csarsrud, 2002). These programs empower students to transmit abstract ideas into viable businesses. Such programs not only cultivate a spirit of resilience, adaptability, and problem-solving but also develop crucial qualities for navigating practical dynamics into the competitive landscape of the real business world. Thereby, literature itself safe to conclude that entrepreneur can be made". (Sanchez et al., 2013). Furthermore, the higher levels of entrepreneurship programs are indirectly associated with countries' economic growth drive over a long period of time. Entrepreneur activity goes hand in hand with the economic performance of any country. (Praag & Versloot, 2007).

Pakistan, with an estimated population of 241.49 million in March 2023, is<sup>1</sup> currently facing an economic crisis. Unemployment has been a persistent issue; probably, job opportunities do not keep pace with the increased workforce. Only the province of Punjab accounted for 127.68 million population. According to the Higher Education Commission (HEC), 31 private and 51 Public universities are offering entrepreneur training and educational programs in Punjab. Several studies have discussed the entrepreneurial process in Pakistan. Many of these are meant to define barriers and the development of an entrepreneurial mindset (Rizvi, 2023). Qamar (2021) has explored the drivers and challenges faced by young Pakistani entrepreneurs. (Zafar, 2022), on the other hand, established certain factors that could potentially influence the capabilities and entrepreneurial intentions of Pakistanis.

Despite the widely recognized importance of these educational programs offered by various universities, less has been talked about investigating the real impact in the actual development

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<sup>1</sup> [Press Release.pdf \(pbs.gov.pk\)](#)

of competencies and sound support by these study programs in the implementation of ideas into reality (Karimi et al., 2016). Entrepreneurship education often falls short in equipping individuals with the comprehensive skills and competencies necessary for successful self-employment.

Currently, Pakistan's uncertain economic situation has made this topic even more critical for inquiry, as self-employment can provide a buffer against external economic shocks. Entrepreneurs often display resilience in the face of economic challenges.

**Hence, the aim** of this thesis is to evaluate the real impact of offered Entrepreneurship educational programs in Pakistani universities in the promotion of self-employment opportunities and to motivate entrepreneurship intention in Pakistani students.

The following research tasks have been considered for the sake of this work.

1. To understand the stages of the entrepreneurial process in general and the role of opportunity recognition and intentions as essential parts of the entrepreneurial journey.
2. To present the ongoing status of entrepreneur education by Pakistani universities, emphasizing on core of study programs situation.
3. To understand the expectations, challenges and further impact on intentions and perceptions of entrepreneurship among Pakistani students.

The scope of this work is only confined to entrepreneur educational programs taught at the university level. Further, out of all provinces (Sindh, Balochistan, KPK, and Azad Kashmir), only the universities in Punjab have been chosen for analysis to establish the relative impact of management study programs on recognizing self-employment opportunities. Further, target groups have been chosen for this analysis from Lahore University of Management Sciences (LUMS). The group of respondents are either graduates or members of the LUMS Entrepreneurial Society (LES). Further semi-structured interviews were conducted among LUMS students to explore the change in their intention and perception of entrepreneurship under the educational program/ course designed for the advancement of entrepreneurial knowledge.

The structure of the thesis is as follows. Firstly, an overview of the scientific literature on entrepreneurship as a multistage process is provided to identify the role of intentions and the formation of opportunity recognition. Further, the link between education, opportunity

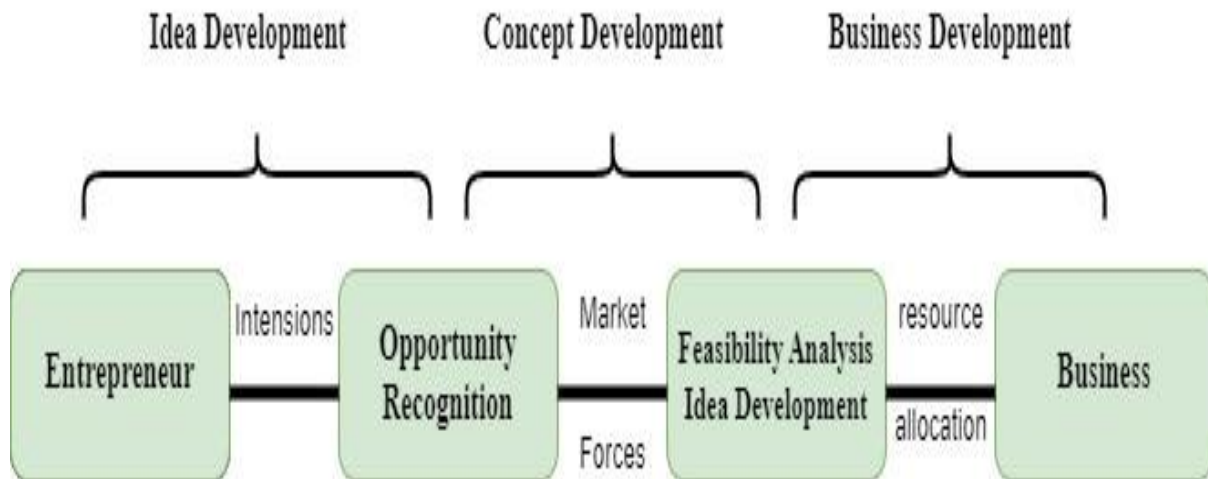
recognition, and intentions as two stages of entrepreneurship is established. Then, I proceed with an overview of the current status of entrepreneurship in Pakistan. This is followed by the methods section. The thesis concludes with the results and discussion.

## **2. THEORETICAL BACKGROUND**

### **2.1 Opportunity Recognition and Intentions as Stages in the Entrepreneurship Process**

On the global landscape, entrepreneurship is regarded as the actualization of the intention to create and develop with the accepted level of risks (Davidsson, 2016). Moreover, entrepreneurship has been regarded as a multistage complex process. This process refers to the series of steps and stages that an individual goes through (Hjorth et al., 2009). One of the fundamental steps that lead to the creation of one's own business is the opportunity recognition and further intention to develop and implement the idea into reality. This and further sections provide the overview of the studies that consider i) the role of intentions and opportunities recognition in the overall entrepreneurial journey and ii) to what extent the opportunity recognition and further implementation of the idea might be affected by the educational programs.

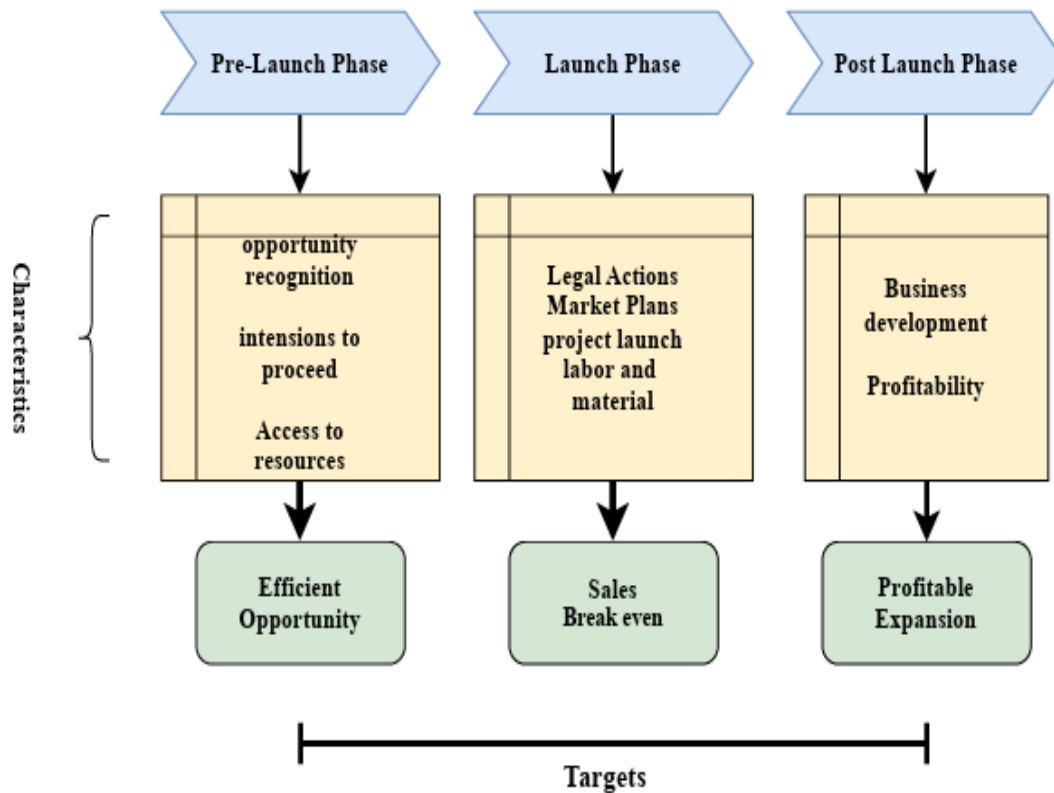
The phenomena of entrepreneurship are not just characterized as an individual activity or a sole person's ability to develop/ produce an idea and generically implement it. (Mets et al., 2022). Consequently, entrepreneurship is a series of activities resulting in the entrepreneurship process. Linan (2007) analyzed the entrepreneurial process, setting up three essential variables to be undertaken for successful entrepreneurs i) the individual project leader; ii) the environment support; and iii) the recognition of opportunities and resources that are needed to develop the whole process. Yet logically, it evolves based on intentions or individual decisions, development of organization, resource mobility, and exchange of goods to complete this process.



**Figure 1.** Dynamic factors model of entrepreneurial process based on Hjorth et al. (2009) and Mets et al. (2022)

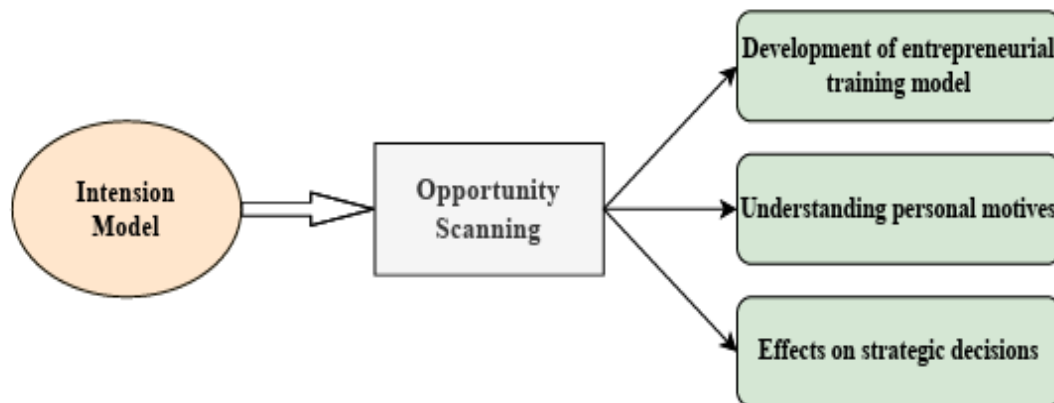
Figure 1 represents an entrepreneurship process as a dynamic model based on all variables/factors involved. Apparently, each stage influenced certain drivers (internal or external). For instance, idea and opportunity realization are largely dependent on individual intention. Whereas some external drivers, such as market dynamics, financial assurance, and government policies, influence feasibility analysis. Further, the business development phase is characterized by efficient resource allocation. (Magistretti et al., 2023).

Another model that considers entrepreneurship as the dynamic model was developed by Baron et al. (2007). The authors consider entrepreneurship as a three-stages process in which intentions and opportunity recognition are the first steps in the pre-launched stage (Figure 2). Although the establishment of the new venture requires financial and human capital, some material resources, and certain legal actions; it is impossible without having a clear idea and risk acceptance. These stages are established during the pre-launched phase when the market is recognized and further analyzed, and the opportunity of the establishment is developed into the intention to act. Here, it is important to mention that the length of each phase entirely depends on the volume and scale of the project (Galindo et al., 2021).



**Figure 2.** Activity-based model of entrepreneurship (Baron et al., 2007)

However, in other models (Ogiemwonyi, 2022; Krueger & Reilly, 2000), intentions are considered not as the post-action after the opportunity recognition but as the first step in the entrepreneurial journey (Figure 3). Yet, it is solid enough for the generalization of planning new ventures and ultimately predicting entrepreneurial intentions. Further, the intention serves as a tool to trigger opportunity recognition (Ogiemwonyi, 2022). Thereby, the intentions provide practical insight for the development of entrepreneurial training models, and the maturity phase of any venture and strategic decisions of growth and exit market are largely influenced by intentions (Krueger & Reilly, 2000).



**Figure 3.** Role of intentions in entrepreneurial development based on (Krueger & Reilly, 2000)

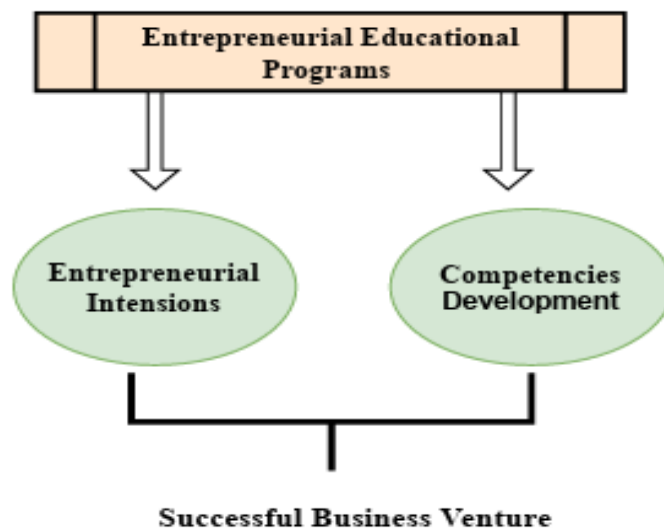
However, the intentions do not emerge by the accident. The whole range of external and internal factors form the intentions and have been largely discussed in the theory of planned behavior (TPB) (see, for example, Bosniak & Schmidt (2020) for the TPB discussion). This theory comes up with three general elements i) personal or individual desire; ii) feasibility to act; iii) social norms and expected behavior (Bagozzi et al., 1992). Convincingly, Ajzen's theory of Planned behavior (TPB) and Shapero's model of entrepreneurial events are considered to be homologous to one another (Ngugi & Kiwara, 2012). Both theories depict elements that are exogenous and indigenous in nature to their relevance to the intention model. Although there is no single view on what is the first element in the entrepreneurship process, intentions, or opportunities, all models acknowledge these two stages as fundamental steps in the further establishment of the venture.

## 2.2 Role of Educational Programs in Entrepreneurship

Entrepreneurial education plays an instrumental role in shaping intentions and competencies (Neck & Greene, 2011; Favolle, 2013; Martin et al., 2013; Harris & Gribson, 2008). These entrepreneurial education programs focused on cognitive and practical learning, encourage participants to cultivate an entrepreneurial approach of observing and ultimately equip them with the capacity to identify lucrative opportunities (Bae et al., 2014). Some studies consider that the new business opportunities have been enhanced largely through greater sensitivity to

the market and technological know-how given by these education programs (Lee et al., 2016). Moreover, (Krueger, 2007) indicates entrepreneurial education programs as facilitators for the entrepreneurial awareness by modifying ways of thinking. As it was commented in Drucker (1985) (p. 32): "Entrepreneurial mystique is not magic neither divine gift. Further this has nothing connected to individual genetics. Anyone can learn this through facilitation provided by education institutions". He emphasis on entrepreneurship education, as this helps motivate multidisciplinary students for entrepreneurship.

In this regard, education provides a favorable environment for the soft and hard skills development among potential entrepreneurs (Figure 4). This is established through two mechanisms: i.provision and adjustment of intentions and ii) through the explicit guidelines, knowldeg building and hard skills development (Hjorth et al., 2009; Mets et al., 2022).



**Figure 4.** Role of Entrepreneurial Education Programs (Neck & Greene, 2011; Favolle, 2013; Martin et al., 2013; Hjorth et al., 2009; Mets et al., 2022)

Furthermore, despite the established advantages of entrepreneurial education, previous literature has yielded contradictory outcomes. Most of yet seems to be positive. One reason of such inconsistency could be unveiled facts regarding effectiveness of these education programs. (Pittaway & Cope, 2007) concludes that research failed to access outcomes of entrepreneurial education program. Similar opinion has been highlighted describing the gaps in literature by (Karimi et al., 2016). According to them, future research should evaluate the

effectiveness of entrepreneurial education program to establish the true role of education programs.

### **3. CASE STUDY OF PAKISTAN**

#### **3.1 Evolution of Entrepreneurial Education in Pakistan**

Various research studies point out that educational advancements in entrepreneurship have occurred over time in various regions of the world (Kuratko et al., 2004). Universities around the globe, especially those in developing countries, are putting in great efforts to promote entrepreneurial education by creating and designing unique entrepreneurial education curricula that incorporate the newest developments in the field (Tanveer et al., 2019).

The last decade has seen a significant evolution in the field of entrepreneurial education in Pakistan, with its central role as a catalyst for innovation and economic development. (Ali and Haider, 2021). Several public and private institutions listed with Higher education commission of Pakistan have been committed to promote entrepreneurship education in the country (Hameed & Irfan, 2019). A paradigm shift in the understanding and teaching of entrepreneurship was initiated by these institutions, emphasizing the development of practical abilities, hands-on learning, and a holistic understanding of business dynamics (Khan et al., 2020).

Keeping up with the times, at the forefront of incorporating new trends and tech into Pakistani universities business education programs, making sure they stay in line with the ever-changing business world, the role of Higher education commission of Pakistan cannot be denied (Khan et al., 2020). To bridge the gap between theory and practice, the institution has played a vital role in providing students with practical experience through projects such as incubators, mentoring programs and collaborations with industry leaders. Furthermore, they are actively engaged in lobbying and collaborating with policy makers and industry leaders to integrate entrepreneurial education into prevailing academic discourse. Support for entrepreneurial initiatives at the national level was increased by this advocacy (Tanveer et al., 2019).

In Pakistan, likewise the other developing countries, entrepreneurship education undergoes changes and faced several issues. The basic issues were faced in form of corrupt leadership,

lack of awareness, lack of qualified institutions, gender issues, family restrictions, instability, insecurity, and legal barriers (Tunio et al., 2021).

Entrepreneurship education is a cornerstone in efforts to promote a culture of innovation and economic growth, especially in developing countries such as Pakistan (Fayolle & Gailly, 2015). The landscape of entrepreneurship education in Pakistan is dynamic, reflecting both progress and challenges in its implementation and effectiveness (Khalid et al., 2019). However, the current state of entrepreneurship education in Pakistan depends on several factors, including institutional support, curriculum, and socio-cultural dynamics (Hameed & Irfan, 2019). Understanding these dynamics is crucial to assess the effectiveness of entrepreneurship education programs and determine development goals (Ahmad et al., 2024).

Currently, entrepreneurship education is seen as a driving force that accelerates economic growth and builds the business skills of individuals to start and appreciate entrepreneurship (Brown et al., 2000; Muhammad et al., 2019). In addition, it is considered a program that focuses on, e.g., incorporation and establishment of a company according to the rules and regulations set by the government (Audretsch et al., 2012; Batool et al., 2013). Nevertheless, entrepreneurship education plays an important role in providing students with the knowledge and skills needed to start a new business and encourages people to start their own businesses by building self-confidence (Khan, 2008; Haque, 2007).

Now a days, universities have started integrating entrepreneurship courses into their curricula to provide students with basic entrepreneurship knowledge and skills<sup>2</sup>. These courses cover things like business planning, marketing, finance, and business creation and prepare students for entrepreneurship. Further, an encouraging thing in development of effective courses is the initiative of hands-on learning opportunities such as business plan competitions, business incubators, and entrepreneurship workshops to provide students with practical understanding (Hameed & Irfan, 2019). No doubt, these initiatives allow students to apply theoretical concepts to real life, develop critical thinking and gain insight into the entrepreneurial process.

Although, the universities listed under Higher Education Commission of Pakistan has started realization of need to collaborate between education institutions and industry partners to expose

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<sup>2</sup> [https://pid.gov.pk/site/press\\_detail/11459](https://pid.gov.pk/site/press_detail/11459)

students to the real business environment and industry trends. Universities often partner with businesses to provide internships, mentorship programs, and research projects that allow students to gain hands-on experience and network in the business ecosystem. Yet, this trend is not similar among public and private institution. One observation explicitly declares that private sector is more actively gaining momentum in these initiatives (Hameed & Irfan, 2019). On limited scale private sector is providing business support services such as business incubator centers and technology parks to support start-up projects unproportionate to the population. (Ahmad et al., 2024).

Another point worth mentioning regarding the key role of universities in Pakistan is promotion of research and innovation in entrepreneurship education. The ground realities and indexes seem weaker with growing years (Khalid et al., 2019).

At institutional level, the government has taken proactive steps to develop and implement policies to promote entrepreneurship. These policies provide a framework to integrate entrepreneurship education into the national curriculum and foster an entrepreneurship ecosystem that fosters innovation and business creation<sup>3</sup>. As far as the financial aspect is concerned, the government provides funding and grants to support entrepreneurship education initiatives at the grassroots level. These funds are used to develop entrepreneurship curricula, train trainers, and facilitate entrepreneurship research and development. (Ahmad et al., 2024).

Convincingly, much has been done by government as well as Higher Education commission of Pakistan for promotion of entrepreneurial education. Yet, several hurdles are persistent and need to be resolved. One major challenge is limited access to quality education, especially in rural areas where educational infrastructure is lacking at grassroot level. This complicates efforts to provide entrepreneurship education to the general population. (Hameed & Irfan, 2019). Moreover, gender gaps and socio-cultural barriers are inculcated to traditions. Thereby, Pakistani women face unique socio-cultural barriers that limit their access to education and entrepreneurship. Cultural norms and gender bias often prevent women from applying for entrepreneurship education and starting their own businesses (Ahmad et al., 2024).

A cultural mindset that favors traditional careers over other discipline is also a challenge. Pakistani cultural norms often favor traditional careers such as medicine, engineering, and civil

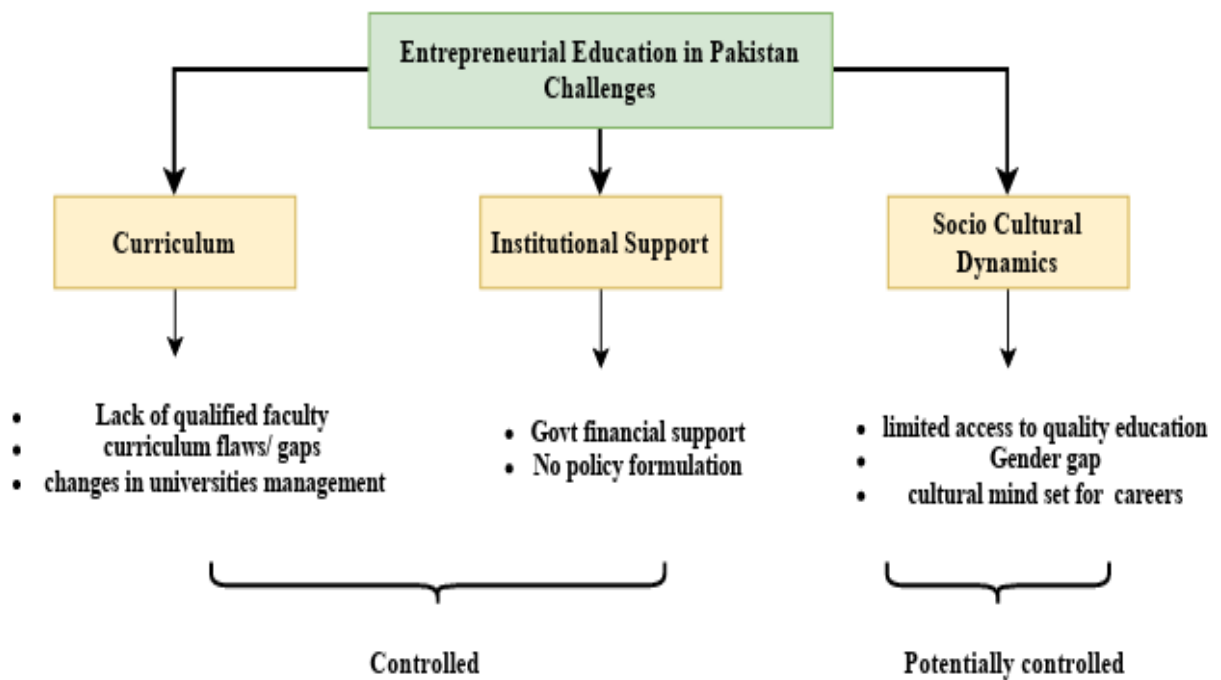
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<sup>3</sup> [https://pid.gov.pk/site/press\\_detail/11459](https://pid.gov.pk/site/press_detail/11459)

services over entrepreneurship<sup>4</sup>. This mindset prevents students from applying for entrepreneurship education and limits the number of potential entrepreneurs.

At institutional level, these challenges are more serious but could be improved. An observant curriculum gaps that is lacking to adaptation of economic needs is one amongst many. Entrepreneurship education curricula has not been revised to adapt changing needs of the Pakistani Current curricula may not be relevant to emerging industries and sectors, limiting students' ability to effectively apply their skills in real-world settings. (Khan et al, 2020)

Furthermore, availability of trained faculty and resources for entrepreneurship education remains a challenge in Pakistan. Limited knowledge of entrepreneurship and lack of resources for practical training hinder the provision of high-quality education. Though, the improvement in this situation has been seen in recent years with introduction of faculty exchange program from foreign universities (Khalid et al., 2019).



**Figure 5.** Challenges of entrepreneurship education in Pakistan based on (Khalid et al., 2019).

Figure 5 represents the overview of the challenges that occurred in the promotion of entrepreneurship education in Pakistan. Noticeably, these challenges consist of socio-cultural

<sup>4</sup> [https://pid.gov.pk/site/press\\_detail/11459](https://pid.gov.pk/site/press_detail/11459)

elements that prevail with long traditions and set perceptions, less likely to be changed quickly but rather need a transition over a long period of time. On the other side, institutional changes, along with required alterations in curriculum, could be improved.

### **3.2 Entrepreneurship in Pakistan**

Business in Pakistan is currently undergoing dynamic change influenced by various socio-economic, administrative, cultural, educational, and technological factors. The socio-economic context, characterized by a large population and a significant youth demographic, offers both opportunities and challenges for entrepreneurship (Ali & Gill, 2020). Government policies, including recent initiatives to support start-ups through tax incentives and incubators, shape the regulatory environment for entrepreneurs (Li et al., 2020). Educational institutions are increasingly embracing entrepreneurship education, but challenges remain to ensure practical relevance and skill set (Hussain et al., 2020). Cultural norms that emphasize job security and risk are often opposed to entrepreneurial endeavours, even though entrepreneurship is increasingly recognized as a viable career option (Hussain et al., 2020). In addition, technological advances, especially in digital technology, have opened new opportunities for business as start-ups use platforms such as e-commerce and fintech solutions to innovate and reach wider markets (Ali & Gill, 2020). Overall, removing barriers such as bureaucratic barriers, lack of education, and cultural attitudes is essential to foster a strong entrepreneurship ecosystem in Pakistan.

The State Bank of Pakistan has launched several loan programs to support entrepreneurship and economic development in the country. One such scheme is the State Bank of Pakistan ‘s Small and Medium Enterprises (SMEs) Modernization Refinance Scheme, which aims to provide affordable financing to SMEs to modernize and expand their businesses. Financing is available for all citizens of Pakistan holding national Identity cards, aged between 21 and 45 years with entrepreneurial potential. For information technology/ e-commerce related businesses, the lower age limit will be 18 years. Financing is segregated into three tiers.

- i. Under tier-1, loan limit is from 100,000 up to 1 million of Pakistani rupee (PKR);
- ii. Under tier-2, loan limit is from above 1 million and up to 10 million of Pakistani rupee (PKR);

- iii. Under tier-3, loan limit is from above 10 million and up to 25 million of Pakistani rupee (PKR).<sup>5</sup>

In Pakistan, indigenous people mostly rely on various financial resources for their entrepreneurial activities, using personal savings and family funds as seed capital. This preference is often influenced by cultural norms that emphasize self-reliance and family support in business (Hussain et al., 2020). In addition, traditional financial institutions such as banks and microfinance organizations play an important role in providing credit and financing to local entrepreneurs (Li et al., 2020). Access to formal financial resources can be limited for certain populations, especially in rural areas and marginalized communities, due to factors such as lack of collateral and lack of financial literacy (Ali & Gill, 2020). In addition, Indigenous entrepreneurs, especially those operating in the informal sectors, tend to use informal sources of finance, such as community savings groups and moneylenders. These informal channels offer flexibility and accessibility, albeit often with higher interest rates and limited regulatory oversight (Hussain et al., 2020). In general, indigenous peoples of Pakistan rely primarily on personal savings, family grants and formal financial institutions for business financing. The use of informal sources of finance is also still prevalent, reflecting the variable financial landscape of the country.

Businesses in Pakistan are mostly run by local citizens and a significant number of businesses are owned and run by people born and raised in the country. Local entrepreneurs use their deep understanding of local market dynamics, cultural nuances, and regulatory frameworks to establish and sustain businesses (Ali & Gill, 2020). While immigrants contribute to entrepreneurship in Pakistan, their participation is relatively low compared to natives. Immigrants can be people who have returned to Pakistan after living abroad or people who have migrated from other countries. Although immigrants bring with them different experiences and perspectives, they often face challenges such as unfamiliarity with the local business environment and limited networks that can affect their entrepreneurship (Li et al., 2020).

The business registration process in Pakistan is often hampered by various hurdles and barriers that present major challenges to new entrepreneurs. One prominent problem is the bureaucratic

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<sup>5</sup> <https://www.sbp.org.pk/Incen-others/sme-8.asp#:~:text=Under%20PMKJ%20DYES%2C%20financing%20is,and%20upto%20Rs%2025%20million.>

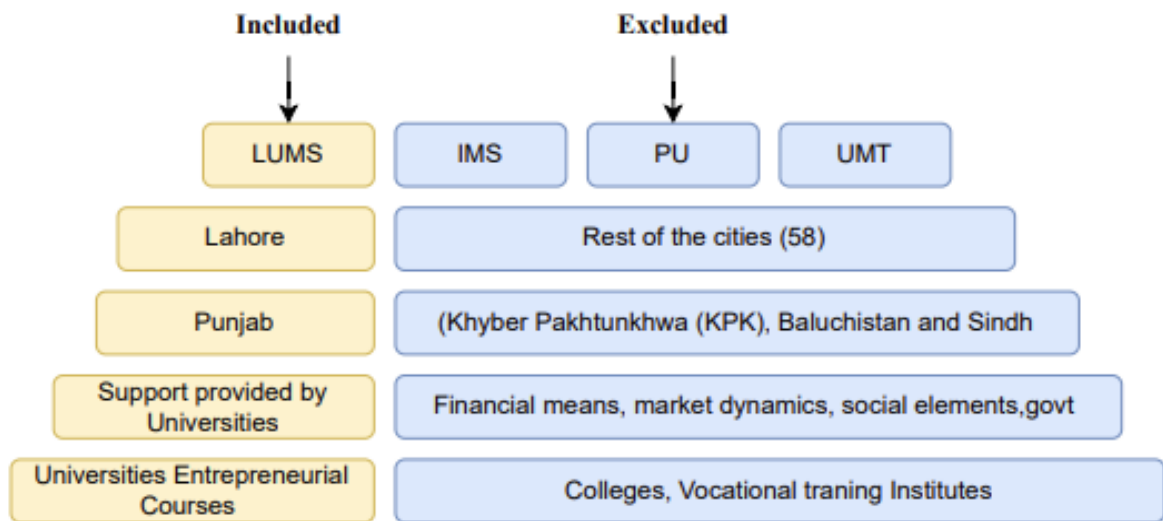
red tape and complex regulatory requirements associated with the registration process (Li et al., 2020). Navigating through multiple ministries and obtaining numerous permits and licenses can be time-consuming and discouraging for aspiring entrepreneurs (Hussain et al., 2020). In addition, corruption, and lack of transparency in regulatory agencies can continue to hinder the registration process, causing delays and increased costs (Ali & Gill, 2020). In addition, inadequate infrastructure and technical inefficiencies create administrative bottlenecks in government agencies, making it difficult for businesses complete registration procedures quickly (Li et al., 2020). Limited access to information and guidance on registration requirements and procedures exacerbates the challenges faced by new entrepreneurs, especially those from marginalized communities or rural areas (Hussain et al., 2020). Furthermore, the high costs associated with registration fees and legal formalities are burdensome financial barrier for many entrepreneurs, especially small businesses (Ali & Gill, 2020). Lack of awareness of available support services and incentives for business registration further complicates the process for new entrepreneurs, hindering their ability to formalize their business and access formal markets (Li et al., 2020). In addition, the difficult labour market and limited availability of formal work. job opportunities in Pakistan push many people to entrepreneurship to create and jobs for others (Hussain et al., 2020).

#### **4. METHOD**

The main aim of the thesis is to explore to what extent educational programs ease the recognition of entrepreneurship opportunities among university students. To answer this question, Punjab, the second largest province by population and land area, although the most industrialized province in Pakistan, has been chosen. In particular, the study geographically focuses on Lahore, the provincial capital, and the most populous city of Punjab according to the 2017 Census. Although several small institutes, including colleges and vocational training institutes, also provide entrepreneurship education/programs, the main emphasis is on entrepreneurial courses offered by formal universities due to higher quality and recognition of the obtained education. There are several formal establishments with high academic standards that contribute to entrepreneurial education (for example, Punjab University (PU), Aims Institute of Management Sciences, FAST School of Management Sciences), yet one of the top-ranked universities in Pakistan located in Punjab is Lahore University of Management Sciences (LUMS).

Lahore University of Management Sciences (LUMS), a top nonprofit university established in 1984 and aiming to address the issue of lack of qualified entrepreneurs, is taken as a case study. Moreover, LUMS is one of two certified business schools by the South Asian Quality Assurance System and the top-ranked business school in the country. Convincingly, the most prominent reason for selecting LUMS is the establishment of the Entrepreneurial Society (LES), which is the only student-based society in Pakistan. This society is involved in several projects, and participants are actively involved in various ongoing projects in collaboration with top industry partners.

There is no denying the fact that the relationship of skills and education taught in universities with self-employment opportunities recognition is not direct. Yet, several externalities including financial resources, ongoing market variables, social elements, as well as infrastructure supports, and government policies (fiscal, monetary) play a role in startup decision-making. Yet, considering the purpose of the study, only focus will be on the role of course content and hands-on experiences provided by university education. The rest of the elements, though essential, are excluded from the analysis (Figure 6)



**Figure 6.** Focus of the thesis. Compiled by author.

As the first stage of the analysis 20 semi-structured interviews with the students of LUMS were conducted to understand their perspectives on the educational program and how the obtained education impacts their entrepreneurial intentions and opportunity recognition. The respondents were between age of 24-28. Further, 9 out of 20 passed MBA from LUMS, whereas 2 from MS Business and Public policy, 3 from MS Supply Chain Management, 3 from MS Technical Management and Entrepreneurship while 3 respondents belong to MS financial Management program. The respondents are the members of LES societies and have real collaboration with business partners in LES Society. All twenty respondent either have start-up or intended to start practical business in near future. In addition, All graduate from LUMS in past three years. Thus, it would be still possible to relate their experience in couple of years with less informative being forgotten. The group of respondents was chosen regardless of gender and age differences, as the sole purpose is to evaluate the effect of studies.

As far as the teaching methodology at LUMS is concerned, a variety of instructional strategies are being applied, the Lahore University of Management Sciences' (LUMS) entrepreneurship program aims to provide students with a thorough understanding of entrepreneurial principles and skills. In addition to offering a theoretical basis through lectures covering basic theories and terminology, LUMS places a strong emphasis on experiential learning through case studies, interactive sessions, and workshops. Students practice critical thinking and problem-solving skills by examining real-world entrepreneurship settings. A variety of exams,

presentations, and projects are used as assessment techniques to make sure students can apply their theoretical knowledge in real-world situations.

For this study, semi-structured interviews were chosen as the method because they allow for detailed narratives and insights from respondents. In this way, it is the most favourable method for obtaining rich qualitative data for content analysis. Further, this choice of data collection was based on the fact that the topic of choice, entrepreneurship education, and self-employment, involves personal experiences, motivations, and challenges. Thus, interviews will likely allow for a deep dive into all these aspects in decent detail.

The interviews were conducted online in English/ Urdu languages and later translated into English for further analysis. Before the interviews, respondents were informed about the aim of the interview and gave permission to use the collected material for research purposes only. The interview questions were formed based on previously conducted literature analysis (see Annex 1). For example, question two is solely to explore the intangible effect of the studies on personal motives. Later questions like three were addressed to explore the study course support and, later, the experiential learning opportunities. The second part of the questionnaire (5 to 6.4) dealt with post-study experiences. The interviews were conducted anonymously. When the saturation point was archived, the study went further to the next stage of the analysis.

In the second stage, qualitative content analysis was applied. Four selected categories were: i) expectations from the educational programs; ii) requirements that students apply for effective education; iii) challenges and difficulties that students faced during education; iv) impact of education. These categories were considered relevant themes to explore further based on the theoretical background presented in this study and were thus selected deductively.

## 5. RESULTS AND FINDINGS

### 5.1 Initial Expectations and Intentions

Apparently, the finding suggests that the initial expectations of candidates related to the program were quite meaningful. Interview question 2 was set to analyze the pre-study motivation and intentions of participants that reflects their motives and clarity of ideas connected to their business plans in the future. 18 out of 20 respondents mentioned that either they are already having start-ups or are willing to start soon. Yet, the rest have taken the course as a formality since the objective was not to start a business but for *"management-related jobs"*. Several interviewers highlight that they are looking for *"advancement in ideas"* and not just to initiate a start-up. It was found that practical knowledge and realization of real-world examples were mostly demanded. One of the respondents talked about his expectations as he was looking for *"targeted knowledge"* to stay in line with his business plan. Another confirms this expectation by stating that *"looking for actionable plans to deepen my understanding and refine my approach"*. All things considered; however, it seems that individual intentions were strongly related to the course and their future goals as well.

### 5.2 Support Provided by Entrepreneurial Programs

The results reveal a very limited scope offered by entrepreneurial programs, making the designed educational programs least effective in terms of delivering comprehensive skill development and further their enhancement. Question 3 of the interview was meant to explore the support provided by educational programs. The majority of respondents discussed this course content and teaching methodology. A significant response was positive in terms of *"soft skills"* development including communication skills with specified business terminologies. A respondent regarding course content states that this is *"tough with tight deadline"*. Digging down into further details has highlighted quite many disadvantages of the course structure. One of the prevalent was a topic choice, which, seemingly *"quite abstract, clearly lacked practical relevance"*. Some of the respondents mentioned that *"the study content is old dated, missing the current scenarios or examples"*. An understanding of unclear content is shown by this respondent: *"It was old theories, don't know where to use"*. Furthermore, overcrowded study groups in one batch limit the opportunity for one-to-one interaction. As mentioned earlier, there have been clear demand and high expectations for practical guidelines by the respondents. Results, on the other hand, reflect very limited opportunities. Most respondents reported that

they had a mandatory internship that, by default, was a part of the course. However, this internship was not practical and was very limited: *"We simply went there [to the company] and got some recommendations. However, I cannot apply that to my own idea"*. Other than this study, programs were found to have one exhibition and some case studies. A respondent commented on his internship experience: *"it was a formal internship where host industry was treating me as a visitor"*. This implies a clear gap and mismatch between expectations and reality.

### **5.3 Challenges of Entrepreneurial Programs**

Apart from the discussion related to the design of the entrepreneur study program, the related teaching methodology was also taken into account by several students. Question 4 deals with the challenging part of the experiences. As understood, the broad outline of the course is part of the university curriculum design. But topic choice and delivery methodology are solely the teacher's choice. The study found overlapping views of respondents in content/course delivery methods and approaches confirming several respondents' views regarding the *"lack of diversity and experience of teaching staff"*. This homogeneity seemingly limits the range of prospects.

Unclear content is a most observant challenge that signifies the importance of the arrangement of content and courses in a more meaningful sequence in each semester. A related observation regarding the type of content choice for these study programs considers them as *"too philosophical and terribly hard"* to understand.

Moreover, respondents also experienced limited exposure to teachers who are scholarly persons, mostly engaged in the research field. One obvious reason for this is the standard of professor selection criteria for applicants. Realistically, it is hard for a practically active businessman/entrepreneur to qualify as a teaching faculty. Thereby, an obvious gap between theoretical and experience-based knowledge transfer could be potentially observed. One of the respondents perceived the internal departmental collaborate very weak. This is an undeniable fact as this collaboration is part and partial of such a broad study program. For Instance, the management department also benefits from other disciplines for their expertise in order to provide quality and updated knowledge. Yet the observant apparently states: *"I really did not find any interdisciplinary collaboration"*.

The main challenge noticeably has been limited practical learning experiences. Sixteen out of twenty respondents stated this in one way or the other. Some regarded this fact as *"heavy*

*reliance on traditional teaching methods". A participant claimed that "theoretical knowledge sometimes overshadows the practical skills and real-world experience". Based on such a strong claim on which the majority of participants agreed, another related fact is the assessment approach. However, with the passing years, universities are improving their assessment approach to make it more convenient and effective for the desired outcomes. Yet, the assessment method still seems to mismatch with the real-life requirements. This exam system "has not effectively accommodated different learning styles or encouraged active student engagement".*

The finding suggests that apparently, the reason for the huge gap between education and practical business is probably the fact that students do not perceive courses as part of their practical education/training or that it is difficult for them to recognize the practical value of the education: *"I see course work was too stubborn to absorb some outside discussions. Purpose was to complete course outline".*

#### **5.4 Post- Study Impact**

The empirical part of the research is safe to conclude a very nominal impact of entrepreneurial progress on self-employment opportunity recognition. Question 5 discussed the post-study impact. As a matter of the question, actual effectiveness is perceived as one's ability to either create or find employment opportunities. The facts, thereby, only support in favor of the development and enhancement of soft skills: *"I don't relate my studies with my business activities, you know the grounds are different than theory, but just maybe sometimes I can relate few things".* One potential reason out of several factors is the absence of contextual study material. It is understood as several respondents reported that the focus stayed on the course outline that was seemingly missing the real-world scenarios: *"I struggled to translate that knowledge into a viable business plan".*

Convincingly, a part of these programs seemingly missing to equip an individual to proactively identify opportunities by looking for market gaps and customer pain points. This realization was observed by the respondents who adopted skills and learned from practices: *"Mostly we rely on information from related business partners".* Those who are out of business but have had some ideas even failed to develop their infant ideas: *"Why don't they introduce small-scale models?".* This is a clear indication that something great is missing.

Firm evidence from the study reveals a noteworthy trend among participants who have either initiated a business venture or conceived a rough idea: their plans remain largely unchanged despite their engagement in entrepreneurship educational programs. Even after being exposed to educational interventions meant to promote creativity and recognize opportunities, these people nevertheless appear to be stuck with their original ideas: *"I have valuable information about business processes, but my main plan is not changed based on my degree"*. Another respondent stated: *"Finishing my education gave me confidence in my entrepreneurial endeavours, but it didn't radically change my original business idea. Instead, it gave me the tools and resources to navigate the complexities of starting a business and make informed decisions"*.

An intriguing explanation for why respondents' original business plans have persisted even after enrolling in entrepreneurship education programs can be found in the data gathered from question 6, which shows their affiliation with family businesses or small projects within partnerships. It implies that these people may already possess a solid foundation or context-specific knowledge from their real-world involvement in partnerships or family enterprises. As such, the broad data offered by study programs could not be entirely in line with the particular needs or subtleties of their real business endeavours. This emphasizes how crucial it is to customize entrepreneurship education to meet the various requirements and circumstances of would-be business owners, particularly those who have experience in actual business settings. With industry-specific courses, mentorship programs, and case studies, educational efforts.

## 6. DISCUSSION AND CONCLUSION

Certainly, the implication of the concept of the effectiveness of entrepreneurial educational programs (EEP) is more than just the self-employment opportunity recognition. The multifaceted phenomenon causes a greater impact on economical situation on which the world has been focused on.

The synthesis of research reveals the significance of intentions and initial expectations among students embarking on entrepreneurship education. This is evident that students chose the program with quite meaningful inspiration that differ from person to person yet, stays align with their goals. Therefore, research indicates a common desire among students for their ideas to be refined and further developed. The role of entrepreneurial education programs seems to be positive with respect to these intentions and motivation to be stayed positive. Generally, entrepreneurship programs demonstrate a commendable success in fulfilling their primary objective of providing students with a common understanding of the entrepreneurial process.

Firm evidence from the results explored a clear pattern for entrepreneurial courses support in favour of enhancing soft skills. The respondents highlighted the fact that traditional educational frameworks sometimes prioritize academic knowledge over practical application. The focus on standardized testing and rote memorization can make it more difficult for students to fully engage in the experiential learning necessary for entrepreneurship. As a result, entrepreneurial courses have struggled to promote the practical aspects necessary for real-world success. This indicates a pressing need to redesign these courses to balance academic knowledge with practical, hands-on experiences that foster essential entrepreneurial skills.

Convincingly, a part of these programs seemingly missing to equip an individual to proactively identify opportunities by looking for market gaps and customer pain points. There was a strong perception among participants that they were less likely to find a reasonable way to incorporate themselves in the business world, even though all of them are somehow related to LES societies and have some side work. However, they negate the idea that their correspondence degree has contributed to their ability to independently approach work and create opportunities. Some respondents mentioned that the experience of family or friends in entrepreneurship was much more helpful compared to formal education due to its more practical approach.

All things considered, however, the study safe to conclude a very nominal impact of the educational programs on enabling students to explore the opportunities. It may not always be able to provide a strong assistance in the context of Pakistani students.

Yet, the wider economic impacts have not been investigated with the view of loss of economic value that could in turn provide a buffer against the economic shocks in form of greater business activities. Though the study has chosen a relatively narrow approach with respect to dimension of issue. Moreover, the selection of sample size is just limited but the significance of results validates the importance of the topic. Entrepreneurship education programs in Pakistan hold immense potential to address critical economic challenges and drive sustainable development. The economy of Pakistan has been struggling with slow growth and little investment. Education in entrepreneurship can stimulate economic growth by cultivating a mindset that values creativity and taking calculated risks. Students that engage in entrepreneurial endeavours make a positive impact on the economy by starting new businesses, increasing productivity, and creating innovative goods and services. Moreover, Pakistan is highly dependent on imports for several necessities, which causes trade imbalances and currency depreciation. The country's economy may be strengthened and dependency on imports reduced by encouraging students to create local solutions to meet domestic demand through entrepreneurship education.

Another point worth mentioning here is that by fostering entrepreneurship among underrepresented groups, such as women and rural people, entrepreneurship education can significantly contribute to the promotion of inclusive growth. Pakistan can unleash the entrepreneurial potential of all its citizens and promote more equitable economic development by granting equal access to entrepreneurship courses and support. Also, by offering an alternative to traditional employment, these programs can mitigate high levels of unemployment. In conclusion, entrepreneurial education programs can have a significant economic impact in Pakistan by tackling unemployment, promoting economic growth, and utilizing youth potential.

The current research also has the policy value and suggests a few potential pathways on how to improve the situation. The research results addressed the policy at two levels. First, this holds significant implications for university policy-making by highlighting the efficiency of curricula. it clarifies whether or not present entrepreneurship curricula are effective in helping students develop an entrepreneurial attitude. This helps institutions improve their teaching

strategies and better prepare students for the ever-changing business environment. Moreover, policymakers can design interventions to foster an atmosphere that supports innovation and the creation of enterprises, hence promoting economic development and job creation in Pakistan, by understanding the factors impacting students' entrepreneurial inclinations.

Secondly, government policymaking will be significantly impacted by the analysis. The case study can provide valuable insights for the development of focused support programs and initiatives that foster entrepreneurial potential, improve resource accessibility, and aid in the establishment and expansion of businesses. Additionally, by acknowledging how schooling shapes entrepreneurship.

The results of the study should be considered through the prism of the research limitations it faced. First of all, I acknowledge that the results could not accurately reflect the entire population of Pakistani students as the sample is limited to those from particular universities or geographic areas. Secondly, the study focuses on short-term results, such as the intents of students in a specific period, without taking into account the long-term effects on their success and entrepreneurial behavior. There is the possibility that individual view change with the passage of time according to their experience. Finally, study does not consider the significant impact of external factors like societal norms, governmental regulations, and economic situations. All the above-mentioned limitations could be considered potential pathways for future exploration.

## ANNEX

**Table 1. Interview Questions**

<b>Interview Questions</b>	<b>Argumentation</b>	<b>References</b>
<b>Background information</b>		
Did you participate in any entrepreneurship educational programs before? If yes, which program was it?	Understanding Background and Experience, assessing skill set	Shah et al., 2017
Prior to the program, did you have any idea on how to start your own business or enter entrepreneurship? If yes, how did education help develop this idea?	Evaluating Commitment and Motivation, assessment of change in intensions positive or negative. To explore intangible impact of intensions	Tunio et al., 2021; Fayolle & Gailly, 2015; Krueger & Reilly, 2000
<b>Support provided by education program</b>		
Do you have experiential learning opportunities (internships, competitions, or business incubators)? To what extent do you think this practical experience helped you in some aspects of your actual business setup? What special skills and knowledge did you gain from entrepreneurship education at the university level?	Evaluating Educational Program Quality more accurately skill acquisition and assessment of practical experience	Raza, 2018; Tanveer et al., 2019
What was the most challenging aspect of the educational program?	Evaluation of education program its strengths and weaknesses	Ali and Gill, 2020; Khan, 2019
<b>Post Study impact.</b>		
How did your idea about starting your own business evolve after completing the education? Did you gain a clearer understanding of your idea? Did you change your idea? Did you decide not to become an entrepreneur?	Understanding Impact of Education	Khalid et al., 2021
Did you establish your own business? If yes:	Assessment of practical experience	Krueger & Reilly, 2000

Can you provide examples of how your entrepreneurship education helped you identify and capitalize on business opportunities?	Assessing Opportunity Recognition	Rasheed & Jamil, 2018; Bae et al, 2014
How has your entrepreneurship education contributed to your ability to analyse and adapt to changing market conditions?	Assessing knowledge of real-world applications	Neck & Greene, 2011, Favolle 2013; Martin et al, 2013)
Can you share any instances where your entrepreneurship education provided you with valuable networking opportunities or mentorship?	Exploring Resource Access	Lee et al., 2016
Were there any challenges or limitations in applying the knowledge or skills gained through entrepreneurship education to practical business scenarios?	Understanding Program Effectiveness	Khalid et al., 2021

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## REFERENCES

1. Ali, F., & Gill, A. (2020). Entrepreneurship in Pakistan: A Review and Research Agenda. *Journal of Entrepreneurship in Emerging Economies*, 12(1), 121–151.
2. Ali, S., & Haider, A. (2021). Entrepreneurship Education in Pakistan: Challenges and Opportunities. *International Journal of Management, IT and Engineering*, 11(2), 2454–2648.
3. Ahmad, N., Shaheen, N., & Hussain, S. (2024). Gender disparities in universal primary education: An analysis of women’s education and policy implications in Pakistan (1947–2017). *European Journal of Education*. <https://doi.org/10.1111/ejed.12638>
4. Audretsch, D. B. (2003). Entrepreneurship: A survey of the literature (Vol. 14). Luxembourg: Office for Official Publications of the European Communities.
5. Bae, T. J., Qian, S., Miao, C., and Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: a meta-analytic review. *Entrepreneurship Theory and Practice*, 38(1), 217–254.
6. Bagozzi, R. P., Baumgartner, H., & Yi, Y. (1992). State versus action orientation and the theory of reasoned action: An application to coupon usage. *Journal of consumer research*, 18(4), 505-518.
7. Baron, R. A., & Shane, S. (2007). Entrepreneurship: A process perspective. *The psychology of entrepreneurship*, 19-23.
8. Batool, I., Xiaozhou, X., Shamsi, I. H., Hongshia, Z., Na, L., Weihui, M., & Hussain, S. S. (2013). A Brief Overview of Current Situation and Perspective of Entrepreneurship Education in Pakistan with Respect to other Countries. *Journal of Agriculture & Social Sciences*, 1, 15.
9. Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *Academic Management Review*, 13, 442–453.
10. Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, 16(3), 352.
11. Brown, C. (2000). Entrepreneurial Education Teaching Guide, 00-7, CELCEE Kaufman Centre for Entrepreneurial Leadership.
12. Erikson, T. (2003). Towards a taxonomy of entrepreneurial learning experiences among potential entrepreneurs. *Journal of Small Business and Enterprise Development*, 10(1), 106-112.

13. Fayolle, A. (2018). *Personal views on the future of entrepreneurship education*. In A research agenda for entrepreneurship education (pp. 127-138). Edward Elgar Publishing.
14. Fayolle, A., & Gailly, B. (2015). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence. *Journal of Small Business Management*, 53(1), 75-93.
15. Galindo-Martín, M. Á., Castaño-Martínez, M. S., & Méndez-Picazo, M. T. (2021). The role of entrepreneurship in different economic phases. *Journal of Business Research*, 122, 171-179.
16. Government of Pakistan. (2019). National Entrepreneurship Policy. Retrieved from [https://pid.gov.pk/site/press\\_detail/11459](https://pid.gov.pk/site/press_detail/11459)
17. Harris, M. L., & Gibson, S. G. (2008). Examining the entrepreneurial attitudes of US business students. *Education+ Training*, 50(7), 568-581.
18. Hjorth, D., & Johannisson, B. (2009). Learning as an entrepreneurial process. *Revue de Entrepreneuriat*, 8(2), 57-78.
19. Horng, J. S., Liu, C. H., Chou, S. F., & Huang, Y. C. (2020). The roles of university education in promoting students' passion for learning, knowledge management and entrepreneurialism. *Journal of Hospitality and Tourism Management*, 44, 162-170.
20. Jardim, J., Bártolo, A., & Pinho, A. (2021). Towards a global entrepreneurial culture: A systematic review of the effectiveness of entrepreneurship education programs. *Education Sciences*, 11(8), 398.
21. Karimi, S., Biemans, H. J., Lans, T., Chizari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of small business management*, 54(1), 187-209.
22. Li, C., Ahmed, N., Qalati, S. A., Khan, A., & Naz, S. (2020, February 28). Role of Business Incubators as a Tool for Entrepreneurship Development: The Mediating and Moderating Role of Business Start-Up and Government Regulations. *Sustainability*, 12(5), 1822. <https://doi.org/10.3390/su12051822>
23. Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15(5-6), 411-432
24. Krueger Jr, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship theory and practice*, 31(1), 123-138.
25. Kuratko, D. F., & Hodgetts, R. M. (2020). *Entrepreneurship: Theory, process, practice* (Vol. 40). Cengage.

26. Khalid, N., Ahmed, U., Tundikbayeva, B., & Ahmed, M. (2019). Entrepreneurship and organizational performance: Empirical insight into the role of entrepreneurial training, culture and government funding across higher education institutions in Pakistan. *Management Science Letters*, 755–770. <https://doi.org/10.5267/j.msl.2019.1.013>
27. Lee, C., Hallak, R., & Sardeshmukh, S. R. (2016). Drivers of success in independent restaurants: A study of the Australian restaurant sector. *Journal of Hospitality and Tourism Management*, 29, 99-111.
28. Liñán, F. (2007). *The role of entrepreneurship education in the entrepreneurial process*. Handbook of research in entrepreneurship education, 230.
29. Magistretti, S., Sanasi, S., Dell'Era, C., & Ghezzi, A. (2023). Entrepreneurship as design: A design process for the emergence and development of entrepreneurial opportunities. *Creativity and Innovation Management*, 32(1), 5-21.
30. Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of business venturing*, 28(2), 211-224.
31. Mets, T., Raudsaar, M., Vahejõe, K., Kaseorg, M., & Vettik-Leemet, P. (2022). Putting entrepreneurial process competence into the focus in entrepreneurship education: Experience from Estonian universities. *Administrative Sciences*, 12(2), 67.
32. Asghar, M. Z., Kyrö, P., & Gul, F. (2019). *A study of the entrepreneurship education curriculum adaptation process among in-service vocational education teachers*. In *The Role and Impact of Entrepreneurship Education* (pp. 105-129). Edward Elgar Publishing.
33. Nadeem Ul Haque (2007). *Entrepreneurship in Pakistan*. PIDE-Working Papers 2007:29, Pakistan Institute of Development Economics.
34. Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: known worlds and new frontiers. *Journal of small business management*, 49(1), 55-70.
35. Ngugi, J. K., Gakure, R. W., Waithaka, S. M., & Kiwara, A. N. (2012). Application of Shapero's model in explaining entrepreneurial intentions among university students in Kenya. *International Journal of Business and Social Research*, 2(4), 125-148.
36. Ogiemwonyi, O. (2022). Factors influencing generation Y green behaviour on green products in Nigeria: An application of theory of planned behaviour. *Environmental and Sustainability Indicators*, 13, 100164.
37. Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International small business journal*, 25(5), 479-510.

38. Punjab Population 2024 (worldpopulationreview.com)
39. Qamar, U., Ansari, N. G., Gull, S., & Tanveer, F. (2021). Entrepreneurial Finance: Exploring the Drivers and Challenges Faced by Young Pakistani Entrepreneurs. *Journal of Management and Research*, 8(2), 33–61.
40. Hameed, I., & Irfan, Z. (2019, November 4). Entrepreneurship education: a review of challenges, characteristics and opportunities. *Entrepreneurship Education*, 2(3–4), 135–148. <https://doi.org/10.1007/s41959-019-00018-z>
41. Hussain, A., Shahzad, A., & Hassan, R. (2020, December). Organizational and Environmental Factors with the Mediating Role of E-Commerce and SME Performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 196. <https://doi.org/10.3390/joitmc6040196>
42. Rizvi, S. A. A., Qureshi, M. A., Ahmed, Q. N., & Ali, M. (2023). Being and becoming an entrepreneur: A narrative study on the development of entrepreneurial mindset in Pakistan. *Entrepreneurial Business and Economics Review*, 11(2), 171-183.
43. Sanchez, J. C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of small business management*, 51(3), 447-465.
44. Shah, N., & Soomro, B. A. (2017). Investigating entrepreneurial intention among public sector university students of Pakistan. *Education+ Training*, 59(7/8), 841-855.
45. State Bank of Pakistan. (n.d.). Refinance Scheme for Modernization of SMEs. <https://www.sbp.org.pk/Incen-others/sme-8.asp#:~:text=Under%20PMKJ%20DYES%2C%20financing%20is,and%20upto%20Rs%2025%20million> (State Bank of Pakistan, n.d.)
46. Tanveer, M., Karim, A. M. D., & Mahbub, A. (2019). The use of performance measurement in universities of Pakistan. *Library Philosophy and Practice (e-journal)*, 3010, 1-28.
47. Tunio, M. N., Jariko, M. A., Børsen, T., Shaikh, S., Mushtaque, T., & Brahmi, M. (2021). How entrepreneurship sustains barriers in the entrepreneurial process—A lesson from a developing nation. *Sustainability*, 13(20), 11419.
48. Van Praag, C. M., & Versloot, P. H. (2007). What is the value of entrepreneurship? A review of recent research. *Small business economics*, 29(4), 351-382.

49. Zafar, D., Khan, S., & Khan, M. I. (2022). The Factors Influencing Entrepreneurship Capabilities in Pakistan. *International Journal of Social Science & Entrepreneurship*, 2(2), 47-71.

## SUMMARY IN ESTONIAN

### **Ettevõtlushariduse programmide mõju uuring üliõpilaste ettevõtluskavatsusest ja võimaluste äratundmisest Pakistani üliõpilaste näitel**

See uuring uurib ettevõtluse haridusprogrammide mõju tudengite ettevõtluskavatsusele ja võimaluste äratundmisele, keskendudes peamiselt Lahore Juhtimisteaduste Ülikoolile (LUMS) Pakistanis. Uuringus osales 20 vastajat. Varasemad tööd on peamiselt keskendunud noorte Pakistani ettevõtjate ees seisvate takistuste, ajendite ja väljakutsete uurimisele. Lisaks on tuvastatud tegurid, mis mõjutavad pakistanlaste võimeid ja ettevõtlusintentione. Kuigi kirjandus tunnustab ettevõtlusprogrammide väärtust, on väga vähe uuritud, kui hästi need tegelikult toimivad oskuste arendamisel ja äriideede elluviimisel. Need kursused ei suuda sageli anda laiaulatuslikke oskusi, mis on vajalikud edukaks füüsilisest isikust ettevõtjana tegutsemiseks. See uuring uurib LUMSi ettevõtluskursustel osalevate tudengite vaatenurki ja kogemusi, kasutades kvalitatiivset sisuanalüüsi meetodikat. Peamised tulemused näitavad eelistust kogemusõppe ja suurema rakendusliku teadmiste vajaduse järele. Siiski näitavad tulemused vähest seost haridusprogrammide ja ettevõtluskavatsuse ning võimaluste äratundmise paranemise vahel. See toob esile praeguste õppekavade piiratud tõhususe nende aspektide edendamisel LUMSi tudengite seas. Uuring rõhutab vajadust ettevõtlushariduse täiendava täiustamise järele, et paremini vastata Pakistani tudengite konkreetsetele vajadustele ja väljakutsetele, suurendades nende võimekust edukalt ettevõtlusega tegeleda.

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