
Role of Entrepreneurship Education in Poverty Alleviation: Mediating by Entrepreneurial Intention

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ABSTRACT

Keywords:

Entrepreneurship Education
Entrepreneurial Intention
Poverty alleviation
Mediation, Bootstrap procedure

The objective of this research is to analyze the influence of entrepreneurship education on poverty alleviation mediating by entrepreneurial intention. In doing so, we employ bootstrap procedure as suggested by (Hayes, 2013). Further, the data has been collected through a self-administered questionnaire among participants using simple random sampling. The results revealed that entrepreneurship education has an insignificant influence on poverty reduction, however, a significant indirect effect has been observed. Moreover, entrepreneurial skills show a significant both direct and indirect effect on poverty alleviation. Hence, a full mediation of entrepreneurial intention has been observed in relationship of entrepreneurship education and poverty alleviation, whereas, for entrepreneurial skills and poverty alleviation it is partial mediation. The study is first of its kind to analyze the influence of entrepreneurship education and entrepreneurship skills on poverty alleviation mediating by entrepreneurial intention. The paper has drawn attention to some dynamic aspects that are relevant to policy and revealed some areas of interest for further exploration.

INTRODUCTION

Recently, a growing interest has been seen to find a lasting solution to poverty alleviation in developing countries and in entrepreneurship, which is considered an important and strategic tool for economic growth in many nations (Gómez-Grass et al., 2010; Seunke et al., 2013; Thurik et al., 2008) by encouraging innovation, creativity and creating employment opportunities (Bruton et al., 2013) and appears to have a significant influence on poverty reduction and sustainable development (Dhahri and Omri, 2018; Yanya et al., 2013). Numerous studies have found that entrepreneurial endeavors have the potential of pulling out people from poverty, either by encouraging them

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to start their own business venture or by creating employment opportunities for others (Chliova et al., 2015; McMullen,

2011). Kareem (2015) further added that entrepreneurship improves productivity by initiating new innovations and creativity as well as fast-tracking structural changes thereby increasing competition among existing businesses in the market. The same notions are also supported by Dempsey (2009) and argue that entrepreneurship boosts economic growth, social development and job creation as well as enhance social welfare and reduce poverty.

Hence, entrepreneurship development within a country helps in poverty reduction, as it creates job opportunities through new startups or by an expansion of existing business ventures (Ali & Ali, 2013). Entrepreneurship is a driving force for economic growth both in developed and developing economies (Hansson, 2010) which appears to increase social wealth by creating new industries and markets, new jobs and increase income which cultivates high living standards and ultimately reduce poverty (Hussain, Bhuiyan & Baker, 2014). However, these small rapidly growing firms started by entrepreneurial-minded individuals in entrepreneurial culture (Mitra & Abubakr, 2011). In regards to the promotion of entrepreneurial culture, numerous programs have been initiated such as the creation of self-employment support unit (Crum & Chen, 2015), the incorporation of subjects related to business creation (Sardeshmukh & Smith-Nelson, 2011), and development of specific actions that fosters business venture creation (Colette et al., 2005), i.e. business idea competitions, business incubator programs, encouragement and support for startups. Similarly, entrepreneurship education has been widely recognized as one of the driving instruments to promote entrepreneurial attitude of both nascent and potential entrepreneurs (Ahmad, 2012).

Entrepreneurship education has a positive and significant influence on intention of starting new business among the participants (Kuttim et al., 2014) which leads to economic growth and poverty reduction in form of job creation and social transformation (Kim-Soon et al., 2016). Similarly, Ibrahim et al., (2015) and Hattab (2015) found a significant relationship between entrepreneurship education and entrepreneurship intention by involving students in practical and experiential learning experiences (Robinson et al., 2016), and through developing experience and meaning of action (Hagg and Kurczewska, 2016). Further, Basardien et al., (2016) argue that entrepreneurship education can foster achievement oriented behavior and enhance self esteem, which serve as a means of new startups among the students. Since, it is a driving force of entrepreneurial activities and is build and develop through personal competencies and interactions with the environment, entrepreneurship education must be studied deeply to explore how the idea of starting new business originates and how such an idea turns to reality (Al Mamun et al., 2016).

Examining entrepreneurship education is important particularly in the context of Pakistan, where various government' s policies and programs have failed to develop and promote entrepreneurship as a career choice among graduates. Moreover, the author review of literature also indicates the need for better understanding of students' entrepreneurship behavior, since the relationship between entrepreneurship education, students' startup preparation and poverty reduction remains ambiguous due to lack of empirical studies in Pakistan (Kolade, 2017; Ahmad & Damit, 2016).

Therefore, it is necessary to identify the factors, knowledge and skills that influence students' intentions to new start-up or indulge in entrepreneurship effort. Because, limited researches have been conducted on this issue, even though entrepreneurship has been considered a key to economic growth and development (Fayolle and Linan, 2013; Karimi et al., 2014). Regarding this, there is a call for further research to determine and understand the factor of students particularly

entrepreneurship education that encourages entrepreneurial endeavor and also to contribute to the development of understanding in this area (Ahmad & Damit, 2016). Similarly, Kolade (2017) also argue that there is still little knowledge if and how entrepreneurial education can contribute to increasing entrepreneurial activities and poverty reduction. The current article addresses this gap in the literature by exploring and understanding the case of entrepreneurial education inclusion in Federally Administered Tribal Areas (FATA) of Pakistan.

FATA has been characterized by a high unemployment rate, poverty, and, more recently, greatly influence by terrorist violence. Today, the conditions in FATA are enormously volatile having dangerous ramification not only for the local community, but for the country as well as for the entire region (Rahman, 2019). Therefore, it is significant to understand FATA situations and then look for a way forward. In doing so, entrepreneurship can contribute significantly to the sustainable development in FATA, since it provides basis for economic change through promoting income empowerment in an economy. Further, entrepreneurship offers a new mechanism to fight against poverty which stimulates economic growth and development (Seuneke et al., 2013). However, the required entrepreneurial skills and knowledge can be transformed into individuals through education. Because, as per Hannon (2006) education particularly entrepreneurship education plays a significant role in the process of developing entrepreneurial capacity among individuals. Taking a human capital perspective, the present article investigates how entrepreneurship education helps in building entrepreneurial skills (Kuratko, 2005), promoting entrepreneurial mindset and intentions (Hytti and O' Gorman, 2004), and significantly influence poverty reduction through starts of new ventures resulted in employment and higher income. This study tries to answer the following questions.

- i. Does entrepreneurship education contribute to increasing awareness regarding entrepreneurial opportunities and improved entrepreneurial skills in a conflict environment like FATA?

- ii. What policy interventions can be implemented to attain poverty reduction and employment through entrepreneurship education?

The objective of this study is to highlight the need to improve educational systems in order to foster entrepreneurship culture through entrepreneurship education that leads to poverty reduction and economic sustainability. In order to achieve this objective, higher education institutions need to make it compulsory to include entrepreneurship education as a core subject in the curriculum of all educational institutions in FATA, Pakistan.

In addition to the practical implications of the study, the present article contributes to the existing body of knowledge by exploring the importance of entrepreneurship education in alleviating poverty for promoting sustainable development. The mediation analysis adds to existing literature by analyzing how entrepreneurship education can contribute to poverty reduction in the context of Pakistan, particularly the FATA region. The authors demonstrate that entrepreneurship education equips students with necessary skills and knowledge that leads to entrepreneurial intentions, which in turn results in poverty reduction in the form of job creation, income empowerment and social transformation. This is due to the fact that, in the future, undergraduates are the important source of nascent entrepreneurship. Moreover, the present study contributes empirically to demonstrate the importance of entrepreneurship education in Pakistani Universities and recommends a more practical and dynamic structural education program for promoting entrepreneurship. Further, this study also increases the generality of entrepreneurship education research among the academician and calls for further research in the area covering different aspects.

The present paper also has some major impact on entrepreneurship education practices in the Pakistani context. The significant influence of entrepreneurship education in alleviating poverty through entrepreneurial intention proposed in this study affirms the importance of entrepreneurship education in the curriculum of every discipline at the university level. Furthermore, during the teaching process the teachers should cultivate and promote students' self-confidence and entrepreneurial passion among young graduates. In this regard, it is necessary to find strategies on how to convince them on the importance of being an entrepreneur. In this sense, it may require additional syllabus or programs for entrepreneurship study. Further, the study also provides an empirical view on the influence of EE on poverty reduction. It emphasizes the role of EE in reducing poverty, and establishes some importance recommendations from the perspective of both policymakers and entrepreneurs.

LITERATURE REVIEW

Entrepreneurship Education and why it is Important?

The question of whether and how entrepreneurial knowledge, skills and capabilities can be developed among students during the course of education was presented by Cotrugli (1990), and later studied by Cantillon (1931). Following these studies, entrepreneurship education (EE) has emerged as a growing discipline. Diverse disciplines such as education, management, economics and technical studies have contributed to the development of entrepreneurship education (Davidsson, 2008). However, specific definition of entrepreneurship education does not exist (Kailer, 2007). Centre for Entrepreneurial Leadership Clearinghouse defines entrepreneurship education as “the process of providing individuals with the concepts and skills to recognize opportunities that others have overlooked, and to have the insight, self-esteem and knowledge to act where others have hesitated” (cited in Ahmad, 2013, p. 195). Liñán (2014) stated “that entrepreneurship education can be found as the whole set of education and training activities with the intention to perform entrepreneurial behaviors, or some of the elements that affect that intention, such as entrepreneurial knowledge, the desirability of the entrepreneurial activity, or its feasibility”. In entrepreneurship education, the students or candidates are equipped with skills, knowledge and competencies that give them awareness regarding the context of their environment and being capable of seizing commercial opportunities in the market (Elmuti et al., 2012; Malach and Malach, 2014). Similarly, Jones and English (2004) argue that EE provides the ability to identify business opportunities and develop necessary skills, knowledge and competencies to act on them. Antončič et al. (2005) refer entrepreneurial knowledge to the concept, competencies and mentality which are significant and crucial for business venture formation, survival and development.

The review of literature highlights that skills and knowledge required for entrepreneurship can be developed among potential and nascent individuals if an appropriate environment is provided (Gibb, 2005; Kuratko, 2005) and education plays a significant and crucial role in transforming entrepreneurial capabilities (Hannon, 2006). In this regard Gibb (1999, 2005) proposes three objectives for inclusion of entrepreneurship education; to build a diverse understanding of entrepreneurship (Jack and Anderson, 1999); develop entrepreneurial mindset (Hytti and O’Gorman, 2004), and to understand how to start and manage a business venture (Solomon et al., 2002). Fayolle et al. (2007) found a significant difference between those students who have studied entrepreneurship and those who have not. Students with entrepreneurship education have high probability of new startups and had intentions to be an entrepreneur (Ibrahim and Soufani, 2002; Noel, 2001). This highlights the importance of inclusion of entrepreneurial education as a subject in every discipline in all academic institution particularly in developing countries like Pakistan. Ladzani and Van Vuuren (2002) support these arguments and

concluded that entrepreneurship education has a critical role in the success and development of small business ventures. They recommended the introduction and strengthening of EE in the curriculum of all educational institutions.

H₁: Entrepreneurial education results in building entrepreneurial skills and knowledge among students and other potential and nascent individuals.

Entrepreneurship Education and Poverty Reduction

Entrepreneurship has been widely considered a key driver of economic development of a nation (Acs et al., 2009). Previous researches conducted on determining a significant relationship between entrepreneurship and development were mostly at country or region level, however, limited attention has been devoted to local or community level. Further, since entrepreneurship has been recognized globally as a strategic tool for escalating poverty (Powell, 2008), scant attention has been given to explore and determine whether and how entrepreneurship skills and knowledge can be nurtured among the potential and nascent entrepreneurs. Therefore, this paper explores the importance of entrepreneurship education towards entrepreneurial intentions, which ultimately influence poverty. Because, the interventions toward solving unemployment and poverty issues should not be considered in isolation since alternative approaches and programs need to be employed. In order to foster and uplift economic growth and sustainability, the education system has been proved to be an essential and important factor (FGN, 2004 in Akpomi 2009). Since, majority of literature revealed that economic growth has a significant influence on poverty reduction, therefore entrepreneurship education has been recognized as a strategic tool for addressing extreme poverty, as it boosts entrepreneurial capabilities, foster employment opportunities and increases the standard of living (Estrin, Mickiewicz, & Stephan, 2016). Mitra & Abubakar (2011) argue that when developing countries consider eradicating poverty and hunger they emphasize on innovation, creativity, skills and resources. However, in order to achieve these objectives, they lack the necessary infrastructure and expertise to support such objectives. Entrepreneurship education could be a strategic tool to overcome these deficiencies by enhancing capacity building, thereby creating employment opportunities, increasing international trade and reducing the rate of poverty within a nation (Mitra & Abubakar, 2011; Adenustsi, 2009).

Adofu (2013) found a lack of entrepreneurial skills among the youth is one of the possible reasons for poverty in Nigeria. Entrepreneurship education can make youth responsible and capable to fight poverty by enhancing their entrepreneurial capabilities (Raposo and Paco, 2011). Akhuemonkhan, Raimi

& Sofoluwe (2013) studied the role of entrepreneurship education in stimulating youth employment. They found a significant relationship between employment and entrepreneurship development that resulted in reducing poverty. Similarly, Enu (2012) argues that the main goal of entrepreneurship education is to increase students' capacity to respond positively to societal changes. Further, through EE they are equipped with capabilities to deploy their skills and knowledge for the better of the larger society. They are also become empower in their decisions to take initiatives and risk and shows a more responsible attitude (Enu, 2012). These empirical evidences highlighted the significance of entrepreneurship education and show that businesses formation could be a possible solution for eradicating poverty through job creation and income empowerment (Bruton, 2010). However, little empirical studies have been conducted to identify the role of entrepreneurship education in poverty reduction in a conflict zone (Honig, 2001). Therefore this paper explores the relationship of entrepreneurship education and poverty in a less developed and conflict area like FATA Pakistan.

H₂: Entrepreneurial Education has a significant influence on poverty alleviation.

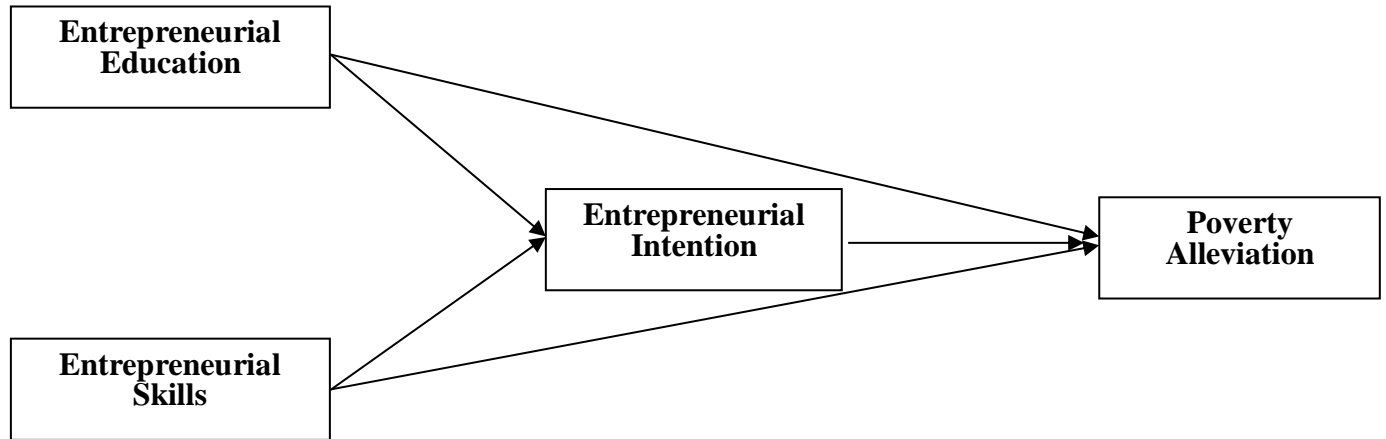
Mediating Role of Entrepreneurial Intention

Numerous studies have demonstrated that entrepreneurship education significantly contributes to entrepreneurial intention among potential and nascent individuals (Souitaris et al., 2007; Izquierdo & Buelens, 2008; Fayolle et al., 2006). According to Mumtaz et al. (2012) and Turker and Selcuk (2009) entrepreneurship education has been widely considered as a strategic approach to equip students with necessary skills and knowledge about business enterprises and being an entrepreneur. Entrepreneurial education also significantly affects students' attitudes towards their career choice (Peterman and Kennedy, 2003). The relationship between entrepreneurship education and entrepreneurial intention has not been well established particularly in developing countries (Souitaris et al., 2007; Izquierdo & Buelens, 2008). The current paper explores this relationship by examining the mediating role of entrepreneurial intention among entrepreneurship education and poverty reduction. We propose that entrepreneurship education contributes to the development of necessary skills and knowledge (Mumtaz et al., 2012) that influence students' intention to be an entrepreneur, which leads to economic growth and poverty reduction through job creation. As Turker and Selcuk (2009) found that entrepreneurship education at the university level in Turkey has a significant influence on entrepreneurial intention. They further argue that education on entrepreneurship is very helpful in developing knowledge on entrepreneurship, as supported by cross-culture study of Moriano et al. (2012). A similar study has been conducted in

Malaysia found that appropriate entrepreneurship education exposure will influence the students to be an entrepreneur (Mumtaz et al., 2012). Thus, it can be hypothesized that:

H₃: Entrepreneurial intention mediates the relationship between entrepreneurial education and poverty alleviation.

Theoretical Framework



METHODOLOGY

Participants

Since the research was conducted in the Federally Administered Tribal Area (FATA), Pakistan, which has been characterized by the high unemployment rate, poverty, and, more recently, greatly influence by terrorist violence. Therefore, the participants for filling survey questionnaire were selected in different regions of FATA such as Khyber, Bajur, Mohmand, Orakzai, and Waziristan. The participants for data collection have been selected based on the criterion that they must studied entrepreneurship course. The reasons for this are to ensure they have learned theories of entrepreneurship, knowledge of starting a business and are aware of business rules and regulations and other supportive initiative of

Pakistan. A total of 200 questionnaires were distributed among the respondents in which 165 was returned filled. So, the response rate was 82.5 percent. However, the analysis was conducted on 160 survey questionnaires, as, five questionnaires have missing values and were ignored to include in the analysis. The sample consists of university students, employees, managers and owners of small and medium enterprises and university lecturers. Employees at the Small & Medium Enterprise Development Agency (SMEDA) also participated in the survey. The demographic characteristics of the sampled respondents are presented through frequency distribution in **Table 1**.

Instrument

As with any empirical research, the important consideration is how to measure the construct of the study. Since, it has been suggested by George (2011) that existing measurement scales are necessary to adapt from the literature. Therefore, the two dimensions construct measuring entrepreneurial education such as entrepreneurial knowledge and entrepreneurial skills has been adapted from El-Gohary, O'Leary and Radway (2012), Nussbaum (2011) and Lyons & Lyons (2002) respectively. Similarly, the items for entrepreneurial intention were adapted from Liñán & Chen, (2009) and Yurtkoru et al. (2014), which were validated by Ezeji et al. (2015). Furthermore, the scale for poverty reduction comprised of employment opportunities, business opportunities, and increase in standard of living etc. are adapted from Ali & Ali (2013), Eziji et al. (2015) and Ogundele et al. (2012). All the items of constructs were measured with a 5-point Likert-scale, ranging from "1" for (strongly disagree) to "5" for (strongly agree).

Variable	Items	Scale
Entrepreneurial Knowledge	06	Adapted from El-Gohary, O'Leary and Radway (2012), Nussbaum (2011)
Entrepreneurial Skills	03	Lyons & Lyons (2002)
Entrepreneurial Intention	05	Liñán & Chen, (2009) and Yurtkoru et al. (2014)
Poverty Alleviation	09	Ali & Ali (2013), Eziji et al. (2015) and Ogundele et al. (2012).

Data Collection Procedure

In order to distribute research instrument among the sample population, we applied random sampling technique. Simple random sampling is probability sampling in which all the target respondents have an equal chance of chosen to be participated in the survey (Sarstedt et al., 2017). The main advantage of simple random sampling is, it is easy to use and have greater generalizability to the whole population.

Data analysis method

As suggested by Hayes (2013) we employ bootstrap method to analyze the mediation effect of entrepreneurial intention between the relationship of EE and poverty alleviation. Bootstrapping mediation analysis is more powerful, as it considers thousands of observation drawn from sample instead of *N* number of observation. This means that marginal effects observed with normal mediation analyses generally will be significant with bootstrapping. Since it seems to boost power, Bootstrapping is highly popular with researchers (Preacher and Hayes, 2008; Lau and Cheung, 2012) and has become standard in many journals. All the analysis was carried out in SPSS 23 and AMOS Graphics 24.

RESULTS AND INTERPRETATIONS

Descriptive Statistics

The demographic characteristics of the sample respondents are presented through frequency distribution in Table 1. Of the total sample respondents, 74.4 percent are male while remaining 25.6 percent are female respondents participated in filling survey questionnaire. The low level of female participants is due to conservative behavior of FATA region. Regarding, age distribution majority are between 15–25 years and 26–35 years which make it about 78 percent. As per education accomplishments 45 percent of respondents have graduate degree and 25 percent are having intermediate level education. Considering the occupation of respondents, in which students and employees are comprised of 30 percent each respectively, while 15 percent managers and 13 percent owner participated in the survey. When it comes to professional experience, the majority having experience of 1–4 years equal to 41.3 percent followed by 5–8 years of experience with a ratio of 23 percent.

Table I: Demographic Distribution

Characteristic	Frequency	Percent
Gender		
Male	119	74.4
Female	41	25.6
Age		
15-25 years	63	39.4
26-35 years	60	37.5
36-45 years	20	12.5
Above 46 years	17	10.6
Education		
Matriculation	15	9.4
Intermediate	41	25.6
Graduate	72	45.0
Post Graduate	29	18.1
Doctorate	3	1.9
Occupation		
Students	48	30.0
Employee	48	30.0
Manager	24	15.0
Owner	21	13.1
Lecturer	19	11.9
Experience		
1-4 years	66	41.3
5-8 years	37	23.1
9-12 years	27	16.9
13years and above	30	18.8

Reliability and Validity

The reliability and validity of the constructs can be seen in [Table II](#). The reliability was measured by employing Cronbach' s Alpha statistics, shows that all the items have an acceptable internal consistency, as its values are higher than 0.7. Furthermore, in order to asses convergent validity, the average variance extracted value should be greater than 0.50. Since, this value for all the variables is greater than 0.50, which suggest acceptable convergent validity as shown in [Table II](#). Finally, Multicollinearity was assessed by determining variance inflation factor (VIF) and

tolerance statistics, which is presented in Table IV. The VIF statistics for all the explanatory variables ranged from 1.082 to 1.175, which are lower than the “concern value” of 10 (Hair et al., 2010).

Table II: Reliability and Validity (N = 160)

Variable	Item s	M	SD	Cronbach	Composite reliability	Average variance explained	VIF
				's α			
Entrepreneurial Knowledge	6	22.99	3.47	0.775	0.727	0.536	1.16
Entrepreneurial Skills	3	11.75	1.66	0.682	0.765	0.549	1.08
Entrepreneurial Intention	5	17.13	3.35	0.74	0.956	0.561	1.17
Poverty Alleviation	10	36.95	5.46	0.849	0.975	0.699	5

Correlation Analysis

In order to determine the relationship among the variables i.e. poverty alleviation, entrepreneurial knowledge, entrepreneurial skills and entrepreneurial intention; Pearson correlation test was employed on the data set. The results of correlation analysis can be seen through Table III. Considering the statistics all the variables are correlated with each other, as the significance value for all is less than 0.05 level of significance. However, as per Cohen's (1988) criteria the all the variables are moderately correlated with each other.

Table III: Correlation, Mean and Standard deviations

Variables	1	2	3	4	Mean	Std. Deviation
1 Poverty Alleviation	1				36.950	5.462
2 Entrepreneurial Knowledge	.243**	1			22.994	3.470

3	Entrepreneurial Skills	.283**	.213**	1	11.756	1.663
4	Entrepreneurial Intention	.329**	.349**	0.237**	1	17.138
Notes: **p < 0.01; *p < 0.05						

Hypotheses Testing

After establishing the reliability of the instruments and checking for the absence of Multicollinearity, we proceed to test the proposed hypotheses through the bootstrapped procedure as suggested by Hayes (2013). Previous empirical research highlights that for mediation analysis bootstrapping is an appropriate technique, especially when mediation is sequential (Preacher and Hayes, 2008; Lau and Cheung, 2012). Using SPSS AMOS 24 software with 2000 bootstrap samples and 90 percent confidence interval, we determined the path coefficient and in relation to direct and indirect paths linking entrepreneurial knowledge, skills and poverty by mediating entrepreneurial intention. The results of the bootstrap method can be seen in Table V and VI.

Regression Results

The regression estimates derived from AMOS 24 using path diagram can be seen in Table V, shows a significant effect of entrepreneurial knowledge and entrepreneurial skills on entrepreneurial intention. Students by studying entrepreneurship explore the embedded benefit and potential rewards with starting own venture increase the propensity towards entrepreneurship (Bjornali and Støren, 2012). Further, with entrepreneurial education students gain the necessary skills and knowledge that motivate them to take risks and be an entrepreneur. A meta-analysis conducted by Bae et al. (2014) supports a significant and positive relationship between EE and Entrepreneurial intention.

Moreover, the relationship between EE and poverty alleviation is insignificant, as the sig. value is greater (EE → poverty = .183; $p = .137$). Lorz (2011) also found the same result and argue that entrepreneurship education has no direct link with poverty alleviation. Basically, EE enhances entrepreneurial skills and capabilities that lead to business creation, employment opportunity and hence poverty reduction

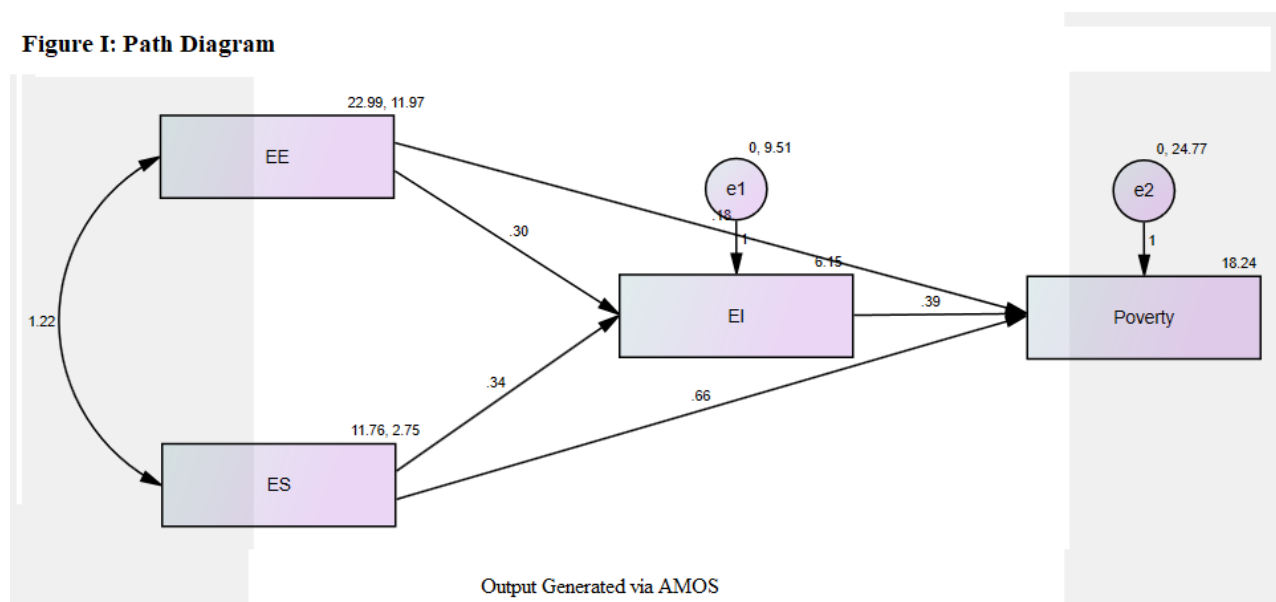
(Mehsah & Benedict, 2010; Hunjet et al., 2015). However, ES and EI have a positive and significant influence on poverty alleviation, as both have a lower value of significance $p < 0.05$. Mitra & Abubakar (2011) also argue that for eradicating poverty a nation should develop competencies and skills among their citizens, which can be achieved through EE. *Theses regression estimates also presented via path diagram in Figure I.*

Table IV: Regression Weight (Default Model)

			Estimate	S.E.	C.R.	P	Label
EI	<---	EE	.302	.072	4.169	***	
EI	<---	ES	.344	.151	2.279	.023	
Poverty	<---	EE	.183	.123	1.488	.137	
Poverty	<---	ES	.661	.248	2.670	.008	
Poverty	<---	EI	.392	.128	3.066	.002	

Notes: EI indicates Entrepreneurial Intention; EE Entrepreneurial Knowledge; ES Entrepreneurial Skills

Figure I: Path Diagram



Indirect Effect

The results with 2000 bootstrap sample revealed that while the direct effect (DE) of Entrepreneurial Education on the poverty alleviation is not significant (DE = .116; $p = .140$). However, entrepreneurial intention fully mediate this relationship, as the Indirect effect (IE) of entrepreneurial education on

poverty alleviation is significant ($IE = .075$; $p = .002$). The same result was found by Mumtaz et al. (2012) and argue that EE helps in developing skills and knowledge that influence students intention to be an entrepreneur. The EI further foster the desire to being an entrepreneur, which results in higher jobs and lower poverty rate (Akhueomonkhan, Raimi & Sofoluwe, 2013).

Similarly, the direct effect of entrepreneurial skills on the poverty alleviation is significant with two-tailed significance level ($DE = .210$; $p = .012$). Further, the indirect effect of entrepreneurial skills on poverty alleviation also significant with the mediation of entrepreneurial intention ($IE = .041$; $p = .024$). This suggests partial mediation of entrepreneurial intention between entrepreneurial skills and poverty alleviation. The results can be seen in Table VI.

Table V: Mediation Result derived from AMOS bootstrapped

	Direct Effect	Sig.	Indirect Effect	Sig	Remarks
EE---→Poverty	0.116	.140			
ES-----→Poverty	.210*	.012			
EE--→EI--→Poverty			.075**	.002	Full Mediation
ES-----→EI---→Poverty			.041*	.024	Partial Mediation

Notes: *** $p < 0.001$; ** $p < 0.01$; * $p < .05$

DISCUSSION AND CONCLUSION

Higher education institution plays a pivotal role in fostering economic growth through research and development that fulfill industry needs and promoting entrepreneurial attitude among young graduates (Wong et al., 2007). As the current philosophy indicate that entrepreneurship can be learned and taught as a discipline at institutions (Aldianto et al., 2018). Therefore, universities can play a significant role in stimulating students through entrepreneurship education program in order to increase young entrepreneurs.

The objective of entrepreneurial education is to provide individuals with the necessary skills and knowledge that encourage them towards self-employment and self-reliant. Thus, students are expected to have required skills and competencies necessary for entrepreneurship, which leads to establishing an

independent business unit. Based on the findings of Ranie and Anggadwita (2016) skills and competencies, persistence and GPA have a significant influence on entrepreneurship success. Entrepreneurship education programs at higher institution level intend to build and promote entrepreneurial mindset and behavior that create added value and have ability/competencies to take advantage of business opportunities (Hadi et al., 2015).

The results of this study although determined an insignificant influence of EE on the alleviating poverty, however, entrepreneurship education and entrepreneurial skills foster the propensity of individuals to become an entrepreneur and self-reliant. Various studies have identified that EE programs serve in the development of entrepreneurial intention among potential and nascent individuals (Souitaris et al., 2007; Izquierdo & Buelens, 2008; Fayolle et al., 2006).

Dinis et al. (2013) argue that EE influence students' future career choice and direction, and has a significant influence on their attitude towards being an entrepreneur. A recent study conducted by Shamsudin et al. (2016) found that those students who are undertaking entrepreneurship as a course during their studies possess a positive attitude towards entrepreneurial careers. We assume that entrepreneurship education in higher studies could encourage and motivate students to engage in various entrepreneurial programs and activities. In this sense, Linan (2004) identified four aspects of EE: one is education for creating awareness, second; for new start-up, third for entrepreneurial dynamism, and lastly education for existing entrepreneurs.

The current article focuses on two areas of EE that helps in developing entrepreneurial activity among students which are entrepreneurial knowledge and skills. As per Ramadani et al. (2017), knowledge spillovers and its roles is significantly associated with performance of the firms. Hence, it also affirms the students' knowledge for creating and developing their own independent business venture. In this regard the result of this study also indicates that entrepreneurship education by focusing on entrepreneurial spirits with creative oriented curriculum need to be included in education (Fayolle, 2013). In addition, higher education institutions also play a key role in processing entrepreneurial values, improving skills in forms of marketing, finance and technology and support new startups (Vallini and Simoni, 2009). These institutions are expected to facilitate students in building and developing entrepreneurship and new startups through business incubators and funding access assistance.

Improving entrepreneurial knowledge and skills provides opportunities for the growth of entrepreneurship venture which contributes in the alleviation of poverty within the region. Since, entrepreneurship has been widely considered as the driving factor of economic transformation aimed at

eradicating poverty by creating business and employment opportunities, which results in higher standard of living and social transformation.

Further, EE also equip individuals with knowledge and competencies to effectively manage small and medium enterprises which play a critical role in economic growth and development. The review of literature highlights that EE serve as a catalyst in the formation and development of SMEs both in developed and developing economies, which results in greater employment opportunities, increase people standard of living by economically empowering them which will contribute into poverty reduction.

Based on the finding of current research, it is concluded that EE influence students' entrepreneurial attitude by enhancing their skills and competencies that will result in creation and development of SMEs leading to eradicating poverty through generation of business opportunities, employment, improved standard of living and economic growth within a nation.

Policy Implications

In order to build and develop entrepreneurship culture among students and other potential and nascent individual, entrepreneurship education should be introduced as a compulsory subject in the curriculum at all disciplines. Further, a great focus should be given on the capacity building of individuals in order to recognize and pursue entrepreneurial opportunities. Because a significant difference has been witnessed in students who take entrepreneurship course and those who did not take it toward entrepreneurship. Further, entrepreneurship education and training programs should not only emphasize on developing entrepreneurial skills and competencies in the business world, but also focus on developing personal and social life of potential and nascent entrepreneurs. When students and other potential individuals receive entrepreneurial stimulus in the form of desire to start a new business of their own, they will start to mobilize themselves and to constantly rebuild their entrepreneurial profile. Therefore, policymakers should consider revisiting the existing education system and process for improving and developing an entrepreneurial culture. The paper has drawn attention to some dynamic aspects that are relevant to policy and revealed some areas of interest for [further exploration.

Limitations and Future Research Directions

The present article is subjects to some limitations, which could be covered in future research. First, since this study is based on cross sectional research design; too short to explore change in entrepreneurial intention in the process of entrepreneurship education in 16 weeks. Since, entrepreneurship education

course mainly taught in 16 weeks study program in Pakistani universities. Therefore, future research should be conducted on longitudinal research design to analyze the causal relationship among entrepreneurial education, entrepreneurial intention and poverty reduction.

Further, this research tries to explore the relationship between entrepreneurship education and poverty alleviation mediating by entrepreneurial intention. Hence, this study did not consider other types of support in the entrepreneurial education process. Further research can use other mediating and moderating variables such as family background, venture capital and government support in the relationship of EE and poverty alleviation.

Finally, in addition to entrepreneurship education, other antecedents may also have an impact on entrepreneurial intention and poverty reduction. Such as, personality traits and role model can also influence individual attitude towards entrepreneurial intention which could results in poverty reduction and sustainable development. Therefore, it is suggested that future research should be conducted to explore other factors that may affect entrepreneurial intentions.

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