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## Factors predicting entrepreneurial activities: A fresh insight from South Asia

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### Abstract

The purpose of this study is to investigate the impact of innovation, fear of failure, perceived opportunities, and perceived capabilities on total entrepreneurial activities in South Asia. The data on all modeled variables were collected from the Global Entrepreneurship Monitor (GEM) for 2001-2020. Moreover, this study utilized Johansson co-integration test to examine the long-run relationship while ARDL has been employed to inspect the short-run relationship among the modeled variable. The results indicate that perceived capabilities, innovation, and perceived opportunities have a positive and significant association with entrepreneurial activity in South Asia but fear of failure has a significant and negative association with entrepreneurial activities. This study revealed the association between innovation, fear of failure, perceived opportunities, and perceived capabilities on total entrepreneurial activity in South Asian countries. This study suggests the policymakers exercise insurance policies against the fear of failure. Furthermore, relevant institutions should arrange workshops, seminars, and platforms to boost up innovation, perceived capabilities, and perceived opportunities so that entrepreneurial activities progress. This study will extend the existing knowledge of entrepreneurial activities` literature. Moreover this study will value add in the information of factors effecting entrepreneurial activities and help the policy makers to prioritize according.

**Keywords:** innovation, perceived capabilities, perceived opportunities, fear of failure, total entrepreneurial activity

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### Introduction

Due to current uncertain situation of Covid-19 unemployment level is raising very sharply, especially in the case of South Asia. This situation attracted investors and policy makers and academic researchers to investigate the relation of starting new ventures and business, which particular characteristics are required in a person to be an entrepreneur to cope the economic conditions. The concept of entrepreneurship is a global phenomenon closely linked to economic growth. Entrepreneurial activities are the “engines” that can accelerate economic growth as well as social development in country (Arabiyat, Mdanat, Haffar, Ghoneim, & Arabiyat, 2019) <sup>[3]</sup>.

Entrepreneurial activities play a key role in the creation of jobs, innovation, creation of wealth in the country, and even in the economic development of a country (Hmieleski & Baron, 2009; Marozau, Guerrero, & Urbano, 2021) <sup>[23, 30]</sup>. Entrepreneurship is similar to self-employment, it is considered an effective solution to handle the problem of unemployment moreover it is also helpful for the youth of the country (Outla & Hamzaoui, 2021).

Many researches have been conducted to find the reasons of intentions of entrepreneurship, but most of the studies tried to find the link between human capital and entrepreneurial activities (Prasetyo & Kistanti, 2020) <sup>[36]</sup>. Some studies found the result that external factors does matter while starting a new business. Whereas some studies are only focusing on psychological factors that affect entrepreneurial activities. Moreover in reality there is still gap exist to find the intentions of entrepreneurs especially for the region of South Asia. Therefore this study is conducted to find the causes which affect entrepreneurial activities. How to improve environment which helps businessmen to establish their business and contribute in economy (Higgins-Desbiolles & Monga, 2021) <sup>[22]</sup>. This study will analyze and add in existing body of knowledge in factors affecting entrepreneurial activity with in region of South Asia.

It is indeed motivated by earning profit promotion, self-satisfaction, and independence. However entrepreneur is a responsible for making accurate decisions which influence the environment, using commodity, resources or institution (Böhme & Kups, 2017). Entrepreneurship is based on different elements of capital such as creativity, bravery, and utilizing opportunities to gear up economic growth by producing wealth and increasing productivity (Dai, 2021) <sup>[14]</sup>. In the modern era the concept of entrepreneurship has been changed from natural resources to socio-political systems with human capital (Tvaronavičienė, Mazur, Mishchuk, & Bilan, 2021) <sup>[46]</sup>. Entrepreneurship provides creativity and more opportunity to people instead of employing resources (Deprez, Cools, Robijn, & Euwema, 2021) <sup>[15]</sup>. In the continent of Asia, there are several countries that rely on entrepreneurial activities as the catalyst for economic growth (Brás & Soukiazis, 2019) <sup>[11]</sup>. According to statistical facts in Pakistan about 65% of the workforce has been absorbed by the small entrepreneurs and successfully contributes to the GDP four times higher than the contribution from the large-scale industries.

Malaysia is another example, where 76% of the entrepreneurial activities in all sectors contribute around 47% to GDP (Faheem, Hussain, Safdar, & Anwer, 2021) <sup>[18]</sup>. Thus, for the well-being of humans and economic development, there is a need to promote entrepreneurial activities in the country as well as in the region. This statistical figures can be improved and can value added in gross domestic product of their relevant countries by finding which factors helps to accelerate the entrepreneurial activities.

The success of entrepreneurial activities depends on many factors such as Perceived capabilities, Innovation, Perceived opportunities, and Fear of failure. Starting a new venture is self-efficacy which is known as perceived capabilities (Doanh, 2021). <sup>[17]</sup> Perceived capabilities are the most influential factor in the development of entrepreneurial intentions. Additionally, perception is very significant for the starting of a new business (Huxley, 2021). Moreover, in the modern era innovation and perceived opportunities are also compulsory for the success of entrepreneurial activities. People will identify opportunities and explore new horizons to start up in an acceptable manner (Clegg, 2021). Besides these factors, fear of failure is hindering the success of entrepreneurial activities. Starting new entrepreneurial activities involves a lot of risks that required a mental state without fear of failure (Roy, 2021). These factors play a significant role in the success of entrepreneurial activities. However, according to the best knowledge of researchers, the factors that affect entrepreneurial activity in the south Asian region received very little attention in the literature.

Over the last decade, economic literature paid more attention to regional economic performance based on knowledge and innovation capacity. While, entrepreneurship drives regional economic performance through innovation, creativity, and advancement of technologies (Dinesh, 2021). Consequently, it leads to local development and regional development.

This study intended to investigate the influence of Perceived capabilities, Innovation, Perceived opportunities, and Fear of failure on entrepreneurial activities south Asian region. This area still needs to investigate as this is less empirically proved which specifically explains regional policies. This paper bridge this gap by adopting a comprehensive approach that includes Perceived capabilities, Innovation, Perceived opportunities, and Fear of failure in entrepreneurial activities by using secondary data. This study highlights how these factors influence entrepreneurial activities in the South Asian region that ultimately affect the economic development of the whole region. This study is an attempt to examine the relation of psychological and behavioral factors that affect total entrepreneurial activities. Although some studies have tried to establish the relation of entrepreneurial innovation activities (Dinesh, 2021) but they have not included all psychological and behavioral factors of entrepreneurs.

This study contributes to the literature of TEA by attempting to respond to a better understanding of the role of psychological and behavioral factors in achieving total entrepreneurial activities. Total entrepreneurial activities as an important driver of establishing a new business, there is little knowledge about psychological and behavioral factors that affect these activities. Our study contributes new insights to decision-makers for developing policies to support the TEA. A better understanding of the factors to contribute in TEA to enact better policies. The ultimate objective of this study is to find the entrepreneurial activities are based on what factors, especially in the case of Pakistan, Malaysia, and India.

## Literature Review

This section presents the literature review that emphasizes practical and hypothetical studies based on “Perceived capabilities, Innovation, Perceived opportunities and Fear of failure” and the effect of these factors on entrepreneurial activities.

### Fear of Failure and Entrepreneurial activity

Joseph Schumpeter has played an important role to explain the need and importance of entrepreneurship in the economic development of any country which was highly ignored in the earlier economy. Entrepreneurship is a mindset that is prevailing so quickly among the regions and countries. It is observed that an increase in entrepreneurial activities also causes to increase in the economic growth of the nation (Sun, Pofoura, Mensah, Li, & Mohsin, 2020) <sup>[45]</sup>. The role and relationship of entrepreneurship are studied several times, particularly for 23 OECD countries to check the impact on unemployment reduction (Meyer & Meyer, 2020). Entrepreneurship as firm start-ups plays a positive and negative role depending upon the region and culture of the nation. Fear of failure is a mental state and feeling that probably we may not get results as we are accepting in reality and it is a great hinder in the road to success. Setting up a new business involves a lot of risks, and it required a mental state without fear of failure (Zarrouk, Sherif, Galloway, & El Ghak, 2020) <sup>[49]</sup>.

Fear of failure is divided into two types (Ivory, 2021) in which perceived risk is prevailing in the entrepreneur's mind whereas objective risk is a risk which directly attached while doing business. Fear of failure is an important factor that plays an important role while starting a new business. The result is inconclusive regarding perception to contribute to an individual's decision of starting a new business or not. Increasing competition and challenging environment have shifted the economic environment, for example, customer preferences have changed now, law and order situation varies in every region of the world. To keep in mind all the above issues, the fear of failure is the major issue to start a new business by any entrepreneur (Mitchell *et al.*, 2007) <sup>[33]</sup>. The relationship between entrepreneurship and fear of failure has been a burning issue and discussed by different authors (Fila, Levicky, Mura, Maros, & Korenkova, 2020). The entrepreneurial theory holds different elements to carry in a successful manner like it is associated with a risk-averse attitude of entrepreneurs or some other factors are involved in it, Because at the time of starting a new business usually, entrepreneurs are less bothering

about the consequences of the business (Lee & Wong, 2006) <sup>[29]</sup>. To examine the role of fear of failure in entrepreneurial activities, this study utilized the definition of fear of failure as; the individuals belong to the age of 18-64 who have opportunities to start a business but they face the fear of failure that prevents them to start a new business.

**H1:** There is a relationship between fear of failure and entrepreneurial activity

### **Perceived Opportunities and Entrepreneurial Activity**

Perception plays an important role in the discovery and creation of a new business. Perceived opportunities mean people will identify and explore new horizons to start up in an acceptable manner (Shane & Venkataraman, 2000) <sup>[41]</sup>. Few studies have been conducted to observe the behavior of entrepreneurs' patterns about risk-taking for a startup (Hmieleski & Baron, 2009; Palich & Bagby, 1995) <sup>[35]</sup>. "Opportunities are in the eye of the beholder" and for this fear of failure, perception and other cognitive factors play an important role (Mitchell *et al.*, 2002). Many researchers have conducted to evaluate the development through entrepreneurship and intention-based development as well (Bird, 1988; Krueger Jr & Brazeal, 1994) for a review, see (Short, Ketchen Jr, Shook, & Ireland, 2010). Perceiving ability is an important attitude toward entrepreneurship activities and the development of feasibility (Mitchell *et al.*, 2002). Different models have been established to evaluate the general attitude towards entrepreneurship with entrepreneurial actions where the role of perception is playing an important role in any start-up process. In this study, we also focus on the role of the entrepreneur's perception that how it helps to work and find opportunities with the availability of resources.

**H2:** There is a relationship between perceived opportunities and entrepreneurial activity

### **Perceived Capabilities and Entrepreneurial Activity**

Another important step for entrepreneurial intention is self-efficacy which is known as perceived capabilities. Perceived capabilities mean the skill and knowledge that is required to start a new business. Since there are many researchers in the field of entrepreneurs who have been using perceived capabilities is an important factor for the formation of entrepreneurial intentions (Audretsch, 2012; Scherer, Adams, Carley, & Wiebe, 1989). However, the questions are still unanswered about whether all hypotheses are effectively functional in the same way as in every region and country. The global entrepreneurship monitor 2000 explained the relationship between entrepreneurship activities, start-ups, and economic growth. There is a positive and significant effect of self-employment on the overall employment of the Sweden economy since 1976-95 (Friis, Karlsson, & Paulsson, 2006). Another study of Sweden proved that near to 70% of new jobs are generated by the efforts of the Small business sector from the period of 1985-89 (Acs & Szerb, 2007). Further, it is also observed new firms are established on the motive of perceived capabilities instead of growth or extension of the business.

Through the above literature, it is concluded that firms are important for the growth of the economy by generating new opportunities for the youth. However few studies do not support this hypothesis that self-employment plays a positive role in the real growth rate (Blanchflower & Oswald, 1998). Moreover in 23 OECD countries during 1966, 1976, 1986, and 1996, the overall other than non-agricultural, self-employment graph has been decreased in most countries. In another study it is proved in 22 OECD countries there is negatively correlated with economic growth of their economies and this is proved through econometric specification and techniques. Entrepreneurship and technological innovation are used as production functions as growth factors in developing countries, using the production function of Cobb-Douglas (Wong, Ho, & Autio, 2005) <sup>[48]</sup>. Innovation means something new in a product for a few or all customers. Conclusively it is suggested that prompt development of new companies create opportunities for people to flourish and earn money.

**H3:** There is a relationship between perceived capabilities and entrepreneurial activity

### **Innovation and Entrepreneurial Activity**

The concept of innovation and entrepreneurship is deep-rooted and discussed in literature several times. "The processes by which firms master and get into practice product designs and manufacturing processes that are new to them" (Rakas, 2020). Innovation plays important role in the establishment of new business, innovation could be in the form of production, technology, optimum utilization of resources or even innovation can be considered in the form of new or improving skills (Bigliardi, Ferraro, Filippelli, & Galati, 2020) <sup>[6]</sup>. Innovation and high technology are two different prospects (Andrusiv *et al.*, 2020) <sup>[2]</sup>.

Although, running a business it is important to differentiate between innovation and invention, which is difficult to identify because both are closely related to each other (Fagerberg, 2006). The only difference between the two is invention can happen anywhere whereas innovation occurs mostly in firms which is an amalgamation of different factors of capabilities, knowledge, and skills. "Innovation requires three basic components: the infrastructure; the capital; and the entrepreneurial capacity needed to make the first two work" (Awan, 2021) <sup>[5]</sup>. If commercial success is the basic requirement then entrepreneurs need to address market needs (Gali *et al.*, 2020) <sup>[21]</sup>. It is important to build a clear role of entrepreneurs to determine the factors that affect their performances. Entrepreneurs' should be considered as the economic agents and drive changes in their particular account. This is an activity and considered different circumstances and aspects of a person who performs to find the obstacles in the business creation process (Ülkü & Engau, 2021) <sup>[47]</sup>.

Schumpeter is with the point of view that entrepreneurial activities are comprised of innovation of new product, its organization, the process of making and devastation. An entrepreneur is a person who initiates new decisions

and implements them accordingly. And entrepreneurs utilize their profits to create new opportunities, and learn from their past mistakes and improve for future purposes as well. Uncertainty is another important factor which is entrepreneurs are taking the edge in the form of more revenue. Whereas Drucker's point of view is innovation is the backbone of entrepreneurship and it helps to grow strategically and promotion of the company. So overall innovation is an important factor for entrepreneurial activities.

**H4:** There is the relationship between innovation and entrepreneurship

## Methodology and Data Sources

### Data Source

The underlying study comprises the determinants of entrepreneurial activity in Pakistan, India, and Malaysia. In this study annual cross-section data is collected from GEM 2001-2020, which provides the opportunity to conduct analyses at the regional level in South Asian countries (Cacciotti & Hayton, 2015 <sup>[12]</sup>; Stuetzer, Obschonka, Brixy, Sternberg, & Cantner, 2014 <sup>[44]</sup>; Wong *et al.*, 2005) <sup>[48]</sup>. We supplement these data with information from the World Bank and the OECD National Account data. The GEM data for the present study refer to Pakistan, India, and Malaysia, covering twenty years (2001–2020). A detailed explanation of the GEM methodology and data of all modeled variables can be found in (Bosma, Hessels, Schutjens, Van Praag, & Verheul, 2012 <sup>[10]</sup>; Sternberg & Wennekers, 2005) <sup>[43]</sup>. We excluded all individuals who are entrepreneurs for many years and established good businesses because we are interested in determinants of entrepreneurial activity in South Asian countries. We contend that it is crucial to know about the determinants of entrepreneurial activities that can be conducted with the help of perceived opportunities, perceived capabilities, and fear of failure, and innovation that might help to establish entrepreneurial intentions in selected countries.

### Methodology

#### Auto-Regressive distributive Lag

An ARDL model is formed with the help of current lagged values one or more explanatory variables. ARDL model got more popularity when the checking co-integration among the variables method introduced by Pesaran and Shin (1999) and Pesaran *et al.* (2001). ARDL is used when the data is stationary on level and first difference and then the purpose is to check the short run and long run relation among the variables. An ARDL approach is applied to distinguish between dependent and independent variables and also it helps to investigate the long-run and Short-run relationship of the model. This methodology is also helpful to remove the problem of omitted variables and autocorrelation. The results obtained from the ARDL approach are efficient and unbiased because it avoids the problem of serial correlation and endogeneity (Iqbal, Khan, Gill, & Abbas, 2020) <sup>[25]</sup>. The ARDL bound test approach is applied on the data which are stationary on a level and first difference both. The short-run and long-run relationships are been applied to the above-given variable to check the entrepreneurial activity of said countries, Pakistan, India, and Malaysia. For this purpose, the ARDL methodology is applied.

The following equation represents the generic and the ARDL equation with a short-run and long-run impact.

$$TEA = \alpha + \beta_1 PO + \beta_2 PC + \beta_3 FOF + \beta_4 INV + \epsilon$$

Where

TEA= Total Entrepreneurial activity

PO= Perceived opportunity

PC= perceived capabilities

FOF= Fear of failure

INV=innovation

#### ARDL equation

$$\begin{aligned} \Delta \ln tea_t = & \alpha + \sum_{i=1}^r \alpha_{1i} \Delta \ln tea_{t-1} \\ & + \sum_{i=0}^r \alpha_{2i} \Delta \ln inv_{t-1} \\ & + \sum_{i=1}^k \alpha_{3i} \Delta \ln po_{t-1} + \sum_{i=1}^p \alpha_{4i} \Delta \ln pc_{t-1} + \sum_{i=1}^q \alpha_{6i} \Delta \ln fof_{t-1} + \alpha_7 \ln tea_{t-1} \\ & + \alpha_8 \ln inv_{t-1} + \alpha_9 \ln po_{t-1} + \alpha_{10} \ln pc_{t-1} + \alpha_{11} \ln fof_{t-1} + \epsilon_t \end{aligned}$$

**Empirical Results and Analysis****Table 1:** Statistic Summary of Variables

	TEA	PC	PO	PC	FOF	INV
Mean	8.762	42.811	40.246	42.811	36.468	18.573
Median	9.472	41.900	41.712	41.900	34.310	16.485
Maximum	16.040	72.980	70.960	72.980	65.320	51.080
Minimum	2.000	20.000	17.000	20.000	20.000	3.500
Std. Dev.	3.342	12.837	12.392	12.837	10.331	8.979
Skewness	-0.025	0.065	-0.112	0.065	0.608	1.651
Kurtosis	2.586	2.133	2.618	2.133	2.790	2.087

Table 1 represents the descriptive statistics of variables. There are significant variations in minimum and maximum values of variables, TEA minimum value is 2.000 while the maximum value is 16.040, the minimum value of PC is 20.000 and the maximum value is 72.980, the minimum value of perceived opportunities is 17.000 while the maximum value is 70.960, the minimum value of innovation is 3.500 and the maximum value is 51.080, and lastly minimum value of fear of failure is 20.000 and the maximum value is 65.320.

**Table 2:** Correlation Matrix of Independent Variables

	PO	PC	FOF	INV
PO	1.000			
PC	0.491	1.000		
FOF	0.527	0.621	1.000	
INV	0.741	0.771	0.782	1.000

Innovation is highly correlated with other related variables such as perceived opportunities (0.741), perceived capabilities (0.771) and fear of failure (0.782), whereas other variables values are 0.500 (see Table 3). According to Shrestha, (2020), no multicollinearity issue in the variables is found as the correlation coefficients are less than 0.80.

**Table 3:** Unit Root Test

Variable	Unit root test	With intercept		With Trend and intercept	
		At I(0)	At I(1)	At I(0)	At I(1)
TEA	LLC	3.451	-1.503*	-2.304*	0.447
		(0.107)	(0.056)	(0.009)	(0.320)
TEA	IPS	1.273	-1.273*	-2.313*	0.530
		(0.304)	(0.044)	(0.005)	(0.298)
PO	LLC	1.894*	1.272	1.784*	1.372
		0.029	0.074	0.036	0.069
PO	IPS	1.273*	1.346	1.462*	1.246
		(0.044)	(0.204)	(0.025)	(0.104)
PC	LLC	2.451*	1.373	2.231*	1.273
		(0.007)	(0.204)	(0.003)	(0.104)
PC	IPS	1.273*	1.173	1.333*	1.162
		(0.044)	(0.304)	(0.014)	(0.203)
FOF	LLC	1.343	-2.985*	1.314	-2.113*
		(0.204)	(0.001)	(0.235)	(0.003)
FOF	IPS	1.373	-1.273*	2.314	-2.213*
		(0.104)	(0.044)	(0.113)	(0.004)
INV	LLC	2.379*	1.373	2.182*	1.263
		(0.054)	(0.124)	(0.014)	(0.124)
INV	IPS	2.273*	1.373	2.862*	1.273
		(0.024)	(0.214)	(0.037)	(0.114)
Kao Residual Co-integration Test: $H_0 =$ No Co-integration					
ADF	t-statistics		Prob.		
	-3.245		0.000		

This study uses a panel unit root test to make sure that dependent and independent variables are either stationary by the methodology of Levin, Lin & Chu t-test on I (0) or I (1) and none of the variables is on I (2) or in higher order. The results of the unit root test are reported below which are stationary on a level and first difference.



The results of panel unit root tests are presented in the above-given table. The results represent that TEA and FOF are non-stationary at level; however, they are stationary at the first level so both variables have an order of integration I (1) while the remaining variables perceived capabilities, perceived opportunities, and innovation are stationary at level. In the panel ARDL approach, the unit root test is applied to exclude the possibility of I (2) variables (Salgado-Banda, 2007). While none of the variables is of order I (2).

The results of the Kao residual co-integration test indicate that a long-run relationship exists among variables of the equation.

**Table 4:** Panel ARDL (1, 1, 1, 1) Short Run and Long Run

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
<b>Long Run Equation</b>				
PO	0.165	0.060	2.769	0.010
PC	0.446	0.055	8.052	0.000
FOF	0.066	0.027	2.429	0.023
INV	0.014	0.093	2.156	0.027
<b>Short Run Equation</b>				
ECM Term	0.689	0.425	2.623	0.012
D(PO)	0.097	0.165	2.588	0.032
D(PC)	0.049	0.260	2.188	0.052
D(FOF)	2.707	2.625	2.031	0.022
D(INV)	2.667	2.806	2.951	0.021
C	7.282	6.709	1.085	0.288

The results of table 3 revealed that the perceived capabilities have a significant and positive relationship with total entrepreneurial activity in the short-run and long-run as well. It is indicated through the result that there is a positive and significant relationship exists between perceived opportunities and total entrepreneurial activity in short-run and long-run time duration. Innovation has a positive and significant role in total entrepreneurial activity for the short-run and long-run, whereas fear of failure has a negative but significant role in total entrepreneurial activities in the south Asian region.

### Discussion

Secondary data is collected for Pakistan, Malaysia, and India from the world development indicator; we propose a framework that links up the different factors which ultimately lead towards entrepreneurial activities of the above-given countries. The result of the analysis shows that some individual characteristics enlighten why people behave differently in similar situations. Many studies have been conducted related to entrepreneurship activities in different countries but still, there is a research gap that exists about the variables that determine the total entrepreneurial activities especially in the region of South Asia. Fear of failure is a hindrance to starting a new business in the case of South Asia, usually fear of failure is higher for the entrepreneurs who have just started their business as compared to those entrepreneurs who have spent a lot of years (Koellinger, Minniti, & Schade, 2007) <sup>[27]</sup>. The countries that have opted for scientific steps to improve and stimulate entrepreneurial quality, these countries are improving in their entrepreneurship ecosystem, technology, and incubation centers. The entrepreneurship ecosystem also activates for better conduct. Universities can take this initiative for their local areas, such as technology parks, incubation, technology transfer, and acceleration for start-ups. Within these social factors Innovation, Perceived Capabilities, Perceived Opportunities, and Fear of Failure are particularly important. For sustainable entrepreneurship, we need to work on the entrepreneur's behavior and beliefs and generate awareness to encourage them. Thus it is concluded that the entrepreneur's working style depends upon attitude, beliefs, motivation, and social attitude towards perceiving things. The findings of this manuscript are consistent with the prior studies in the context of Pakistan, India, and Malaysia. After working on the concept of Innovation, Perceived Capabilities, Perceived Opportunities, Fear of Failure, entrepreneurs may lead to sustainable growth. According to the goals of the organization, the goal of groups and individuals is set that which leads to the growth of the business ultimately. For the start-up and sustainability of the business, the important factor to prioritize is business management.

### Conclusion and Limitations

This study aimed to investigate the psychological and behavioral factors that affect entrepreneurial innovation activities in the South Asian Region. This paper first contributes to the existing knowledge of the literature of total entrepreneurial activities (TEA) and secondly, this study utilizes Global entrepreneurial monitor (GEM) data for the evaluation of determinants of total entrepreneurial activities in the south Asian region. The result of the study confirms that innovation, perceived capabilities, perceived opportunities help to grow entrepreneurial activities in the south Asian region. Whereas fear of failure is a factor that lessens the morale of entrepreneurs of the South Asian region.

Achieving economic development is not possible in the absence of entrepreneurial activities in any country; therefore to sustain entrepreneurial activities should be one of the priorities of Governments. This study revealed

the association between innovation, fear of failure, perceived opportunities, and perceived capabilities on total entrepreneurial activity in South Asian countries. This study suggests to policymakers exercise insurance policies against the fear of loss. Further, more relevant institutions should arrange workshops, seminars, and platforms to boost up innovation, perceived capabilities, and perceived opportunities so that entrepreneurial activities progress. This study has some limitations because of fewer data available on the GEM database, therefore only three countries (Pakistan, Malaysia, and China) have been covered in this research. It is suggested to future researchers that they can take all countries of South Asia.

### Conflicts of interest

All authors declares that there is no conflict of interest. And results are not derived under any pressure or interest.

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