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**ENTREPRENEURIAL INTENTIONS AND CROWDFUNDING ADOPTION IN PAKISTAN: UNVEILING BLOCKCHAIN TECHNOLOGY'S MODERATING INFLUENCE AMONG BUSINESS STUDENTS**

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**Samadia Gul***Phd Scholar Hailey College of commerce University of the Punjab (PU) [samadia99@gmail.com](mailto:samadia99@gmail.com)***Dr. Mubbsher Munawar Khan***Professor Hailey College of commerce Dean of commerce, University of the Punjab (PU) [mubasher.hcc@pu.edu.pk](mailto:mubasher.hcc@pu.edu.pk)*

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**Article Info**

*This study aims to investigate entrepreneurial and crowdfunding intention among university business students of Pakistan, while considering the moderating effect of blockchain technology adoption. The research utilizes the theory of planned behavior (TPB) with the impact of entrepreneurial education to analyze entrepreneurial intentions. The impact of entrepreneurial intention is additionally examined concerning crowdfunding intentions and the adoption of blockchain technology offered by crowdfunding platforms. Data were gathered from 330 university students who are enrolled in business studies in Pakistan and analyzed using PLS-SEM 3. The results indicate favorable impact of attitude, social influence, and entrepreneurial education on entrepreneurial intention. Moreover, there exists a favorable correlation between entrepreneurial intention and the deployment of blockchain technology in the context of intending to use crowdfunding for capital acquisition. This study is novel and the foundational investigation into the correlation between entrepreneurial intention along with crowdfunding intention among university students of Pakistan, incorporating the moderating effect of blockchain technology adoption.*



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**Keywords:** *Entrepreneurial; Crowdfunding; Intentions; Blockchain Technology Adoption, Social Influence, Entrepreneurial Education*

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## Introduction

In developing nations, where the number of entrepreneurial ventures has increased and the unemployment rate has decreased, entrepreneurship education has been acknowledged in the 21st century for its role in job creation and the development of creative and impactful start-up ideas, which contribute to improved financial stability and economic health (O'Brien et al., 2019; Jena, Walter and Block (2016) and 2020. Pakistan boasts the biggest youth generation in the country's history, and it is also the fifth most populous country in the world, according to UNDP figures. Pakistanis under the age of 30 make up 64 percent of the population. Several programs have been launched to boost the country's entrepreneurial spirit, increase employment prospects, and give jobs.

As a first step, Pakistan's Higher Education Commission (HEC) established the National Business Education Accreditation Council (NBEAC) to promote entrepreneurship education programs (EEPs) in a variety of academic fields and foster an environment conducive to business incubation. Secondly, the Pakistani government has introduced the "KAMYAB JAWAN" initiative, which provides chances for Pakistani youth to fully realise their entrepreneurial potential. With this initiative, we aim to generate 10 million new employment opportunities. Moreover, according to the most recent report from the Global Entrepreneurial Spirit Students' Survey (GUESSS), there is evidence that the entrepreneurial intentions of Pakistani students have increased by 11.9% compared to the report from 2018 (Samo and Channa, 2021). This suggests that there is an overall increase in the entrepreneurial culture in Pakistan. After reading this, you should have no trouble imagining a supportive environment for entrepreneurs in Pakistan. It is crucial to encourage young people in developing nations like ours to take the initiative and start their own businesses in order to alleviate poverty and unemployment (Awogbenle and Iwuamadi,

2010). Concerning Pakistan, the vast majority of students favor entrepreneurial paths to financial success and show signs of openness to the idea of entrepreneurship as a career path in the future. A key characteristic of entrepreneurs is their ability to think creatively and implement new ideas; students in this course are actively promoting entrepreneurial activities through this medium (Ali et al., 2011). The number of Pakistani students planning to start their own businesses is disappointingly low (Tanveer et al., 2013). Every society must prioritize the development of entrepreneurial intentions in order to foster entrepreneurship.

Numerous elements, including management, capital, employees, culture, the market, and business acumen, contribute to an organization's success or failure (Belhadi et al., 2019). In both emerging and established nations, small and medium-sized enterprises (SMEs) rely on easy access to capital to succeed or fail (Matshekgga and Urban, 2013). Most people agree that being able to get your hands on some cash is a big deal when it comes to starting a business (Annton and Bostan, 2017). According to Urban and Ratsimanetrimanana (2019), the availability of capital reduces the desire to start a business. Those who are unable to do so may give up on their ambitions of being their own boss. Crowdfunding platforms can offer an alternate source of cash for entrepreneurs in need. One novel approach is crowdfunding, which allows individuals to support company concepts with financial backing in exchange for financial or non-financial rewards (Baber, 2020). A crowdfunding campaign is actually an online public appeal for financial support of a business endeavor (Carbonara, 2020). According to De Buysere et al. (2012), equity-based crowdfunding is a relatively new way for startups and businesses to raise capital, but the dangers are very much the same. According to Bader and Fanea-Ivanovici (2021), crowdfunding websites like Kickstarter.com are creating a space where entrepreneurs can present their business ideas and compete for financial backing. Many studies have found that social influence is a key factor in crowdfunding. (Yu, 2005; Belleflamme et al.,

2014) According to Alalwan et al. (2017), entrepreneurs' knowledge and intention to adopt new technology can be greatly influenced by the information and motivation offered by those around them. Innovative financial solutions can also be derived from fresh ideas in technology and business structures. Innovations in financial technology have lowered the barriers to entry for underbanked and unbanked communities in seeking out banking services. According to Autio et al. (2018) and Festa et al. (2022), businesses and their owners can benefit from fintech since it aids in the management of financial operations and processes. By facilitating the introduction of new technology, it aids in the development of fresh avenues for the supply of goods and services. Financial technology (fintech) revolutionizes the supply of financial services, transforms entrepreneurial ecosystems (Hendrikse et al., 2018), and propels the development of new goods, services, applications, and business models (Wang et al., 2022). This has led to Fintech being a major actor in the rise of new, rapidly expanding fields of digital entrepreneurship (Festa et al., 2022, Leong et al., 2017). Entrepreneurship in the digital realm differs from more conventional forms of new enterprises like restaurants or shops in that it demands technical expertise and substantial human capital (Wright et al., 2007). Stolper and Walter (2017) and Hasan et al. (2023) cite research that suggests financial literacy might influence digital entrepreneurship mindsets through encouraging innovative activities and risk-taking in business. Little is known about the connection between Fintech literacy and crowdfunding intention between developing and developed countries, although other studies in the field of digital entrepreneurship literature assess the role of digital literacy, financial skills, Fintech access, adoption, and usage in new businesses. Additionally, established economies have the necessary market regulations and technological infrastructure to facilitate the establishment of fintechs. The development of long-lasting and distinctive financial innovations relies on this infrastructure in conjunction with reasonably priced technologies (Puschmann, 2017). When

borrowing money becomes more of a challenge in an economy, more fintech startups pop up (Hasan et al., 2023). Pakistan is a developing nation with a middle-income economy, according to this line of reasoning; yet, its infrastructure and culture are lower in terms of technology (Nathan et al., 2022). It is of the utmost importance to study, using TPB (Ajzen, 1991), how Fintech literacy affects the entrepreneurial intention of competent young Pakistani students. Scholars have utilised TPB to investigate the effects of external variables on entrepreneurial intention, since this variable is the most reliable predictor of entrepreneurial decisions about crowdfunding. In order to forecast university students' intentions to start their own businesses and the indirect effect of Fintech literacy on crowdfunding ambitions, this study uses TPB as a holistic model to examine the function of TPB, support for entrepreneurial education, and social influence. We incorporate the latest breakthrough in financial technology, blockchain, as a possible factor in determining plans to crowdfund and to start a business. The study will go a step further by investigating the moderating effect of blockchain technology on the link between entrepreneurial goals and crowdfunding intention.

## LITERATURE REVIEW

### Theory of Planned Behavior(TPB) and Entrepreneurial Intention(EI):

Because of its correlation with mental fortitude, intention has recently emerged as a critical component among students. Determining what an entrepreneur means to do is the main issue plaguing studies on the topic. For the purpose of forecasting entrepreneurial intent, Ajzen's (1991) TPB offers a helpful theoretical framework. A person's determination to act in a particular manner is at the heart of the entrepreneurial intention notion. Three factors—attitudes towards behaviour, subjective norms, and perceived behavioral control—can be used by Ajzen's theory to predict entrepreneurial intention. The amount of time and energy an

enthusiast has invested in carrying out a behaviour is known as their intention, and it encapsulates the various motivating elements that impact behaviour. According to Ajzen (1991), it also provides insight on the level of motivation, effort, and effort required to carry out the behaviour. The mental state of intention guides one's focus, and by extension, one's actions and experiences, towards a goal or the means by which one may achieve that goal.

The Theory of Planned Behaviour (TPB) has demonstrated significant utility in predicting individual intentions and behaviors (Ajzen, 1991; Autio et al., 2001; Khuong and An, 2016) across various contexts in both developed and developing nations (Buli and Yesuf, 2015; Malebana and Swanepoel (2015). In Pakistan, the Theory of Planned Behaviour (TPB) has been largely overlooked by researchers in the field (Khan et al., 2011; Bangash and Naeem, 2014; Shabbir et al., 2016). There is a significant necessity to evaluate an effective model for examining entrepreneurial intention in public sector universities of Pakistan, as students typically exhibit only a moderate intention to pursue entrepreneurship (Tanveer et al., 2013). This study, grounded in Ajzen's (1991) Theory of Planned Behaviour, investigates the factors influencing the entrepreneurial intentions of university students in Pakistan.

According to the Theory of Planned Behaviour, attitude towards behaviour is one of the influencing factors. The term entrepreneurial attitude denotes an individual's proactive disposition towards assuming responsibility for their own learning, career, and life in the context of entrepreneurship. It indicates a desire and value among existing firms and the individual's awareness of the desirability of engaging in entrepreneurial behaviour (Krueger et al., 2000). In the field of entrepreneurship, existing literature indicates a positive and significant correlation between attitudes towards entrepreneurial behaviour and entrepreneurial intentions (Kolvereid, 1996; Krueger et al., 2000; Autio et al., 2001; Souitaris et al., 2007; Gelderen

et al., 2008; Gird and Bagraim, 2008; Pihie, 2009; Schwarz et al., 2009; Ariff et al., 2010; Ferreira et al., 2012). Kumara (2012) identified a moderate influence of attitudes towards self-employment on the entrepreneurial intentions of undergraduates. Conversely, Douglas (1999) emphasised that an individual's attitude towards their work effort is inversely related to entrepreneurial intention. The subjective norm is the primary factor in the Theory of Planned Behaviour (TPB). A person's perception that others, including friends and family, believe he or she should or should not engage in a behaviour is defined as such (Cameron et al., 2012). In other words, it refers to perceived social pressure for or against performing the behavior in question (Ajzen, 1987). Subjective norms significantly influence the formation of entrepreneurial intention, which in turn dictates specific behaviours and contexts (Ajzen, 1991, 2002). Several studies found a significant impact of subjective norms on intentions (Kolvereid, 1996; Tkachev and Kolvereid, 1999; Kolvereid and Isaksen, 2006), while other studies do not support this finding (Krueger et al., 2000; Autio et al., 2001; Linan and Chen, 2009). Social influence refers to the extent to which users perceive that significant others endorse the use or adoption of new information systems. The concept of social influence, akin to subjective norm, pertains to the extent to which significant individuals impact an individual's behaviour (Venkatesh, Thong, & Xu, 2012). This study defines social influence as the extent to which an entrepreneur's peer group motivates and impacts their decision to utilise crowdfunding for capital acquisition in start-ups. Previous studies indicate that social networks and peer influences significantly impact users' decisions to adopt new information systems during the initial adoption phase (Lu, Yu, & Liu, 2005). Interpersonal networks comprising friends, family, and acquaintances are essential for entrepreneurial intention (Mollick, 2014). Project proponents, affiliated to close friends, are considered significant factors influencing the success of entrepreneurial intentions. Consequently, we are incorporating it into the Theory of Planned Behavior as a contributing factor to entrepreneurial intention.

Previous research has discovered a significant relationship between perceived behavioral control (PBC) and entrepreneurial intention (EI) (Mathieson, 1991; Krueger et al., 2000; Autio et al., 2001; Gelderen et al., 2008; Gird and Bagraim, 2008; Souitaris et al., 2007; Linan et al., 2011; Solesvik et al., 2012). A positive correlation exists between perceived behavioural control and the intention to pursue entrepreneurship among business students in contrast to non-business students (Sihombing, 2012). Kaijun and Sholihah (2015) conducted a comparative analysis of Indonesian and Chinese cultures, revealing an indirect effect of perceived behavioural control on entrepreneurial intention in both contexts. In the context of Pakistan, entrepreneurship researchers have rarely employed the Theory of Planned Behaviour (TPB) (Khan et al., 2011; Bangash and Naeem, 2014; Shabbir et al., 2016), despite evidence indicating its strong predictive capacity regarding entrepreneurial intention. The Theory of Planned Behaviour (TPB) is considered the most influential and widely utilized framework for predicting human behaviour (Ajzen and Cote, 2008). Besides several studies focussing on entrepreneurial intention among university students, research has also been conducted on small samples of business or IT professionals (Ahmed et al., 2010; Khan et al., 2011; Ali et al., 2014; Shabbir et al., 2016). This study presents hypotheses for examination concerning bachelor's and master's degree students enrolled in entrepreneurship or related courses at universities across Pakistan. This results in the subsequent assumptions:

**H1:** Attitude of entrepreneurship positively impact entrepreneurial intentions.

**H2:** social influence has positively impact entrepreneurial intentions.

**H3:** Perceived behavioral control positively impact entrepreneurial intentions

### **Entrepreneurial education and entrepreneurial intention:**

Drucker (1985) asserted that entrepreneurship is a skill that can be acquired through training.

Kuratko (2014) confirms that the personality traits, abilities, and skills necessary for entrepreneurship can be developed through training. This paper hypothesises that entrepreneurship can be acquired through experiential learning during the entrepreneurial process and through relevant coursework in entrepreneurship. Entrepreneurial education seeks to cultivate and improve the quality of entrepreneurship, ambition, drive, and a pioneering spirit among college students, preparing them for specific careers, enterprises, or business plans. It aims to develop the strategic resources and capabilities necessary for entrepreneurs and assist them in identifying and recognising business opportunities. In recent years, universities and associated external institutions have conducted various entrepreneurial training programs, which have increasingly garnered attention. The participants in such programs are primarily prospective entrepreneurs or those who, after initiating a business, recognise a deficiency in relevant knowledge and skills. Participants anticipate enhancing their entrepreneurial skills through these programs, enabling them to identify, seize, and pursue opportunities (Roomi and Harrison, 2008). Entrepreneurial education is believed to inspire an individual's entrepreneurship and further affect their perception of and passion for entrepreneurship (O'Conneide and Garavan, 1994). Lundström and Stevenson (2005) posited that entrepreneurial education and training influence individuals' attitudes and behavioural intentions regarding entrepreneurship, as well as enhance their management skills. The objective of entrepreneurial education is to cultivate entrepreneurial capability, encompassing knowledge, attitudes, and various skills (Fiet, 2001). McMullan et al. (2002) demonstrated that entrepreneurial education can enhance the ideation and behaviours essential for entrepreneurship. Botha (2006) suggested that the goal of entrepreneurial education should be to foster individuals' entrepreneurial intention. Katz (2007) conducted empirical research demonstrating that entrepreneurial education and training can enhance an individual's entrepreneurial intention. Barbosa et al. (2008)

demonstrated that entrepreneurial training enhances entrepreneurs' intentions and behaviours, subsequently improving their performance. Thus, we assert that university students receiving entrepreneurial education can cultivate entrepreneurial intention. This paper proposes the following hypotheses based on the preceding analysis:

**H4:** Entrepreneurial education positively influences entrepreneurial intention of students.

#### Entrepreneurial and crowdfunding intention:

According to Baber (2019) Entrepreneurs can primarily explore four forms of crowdfunding for raising funds. One is donation, second one is reward, third type of crowdfunding is equity based, and the last is lending-based crowdfunding. Kirby and Worner (2014) identified that the in 2008 financial crisis was catalyzed by the expansion of crowdfunding, as traditional financial institutions were reluctant to extend credit and borrowers faced elevated interest rates. These forms yield diverse financial or non-financial returns for contributors, and in certain instances, may offer no return

for those entrepreneurs who are unable to source funds from conventional methods (Bruton, 2015); crowdfunding is considered a more easy and cost friendly way of raising money (Kim and Moor, 2017). The assumption of a positive correlation between entrepreneurial intentions (EIs) and crowdfunding intentions (CI) among students, though less explored, was addressed and validated by Baber (2022). The relationship between EIs and CI was examined in the qualitative study by Busse (2018). The research suggests that entrepreneurial action precedes CF action to elevate early-stage levels to subsequent stages (Busse, 2018, p. 306). The sequence EIs-CI is discussed herein. In the same line of thought, we will check the following hypothesis:

**H5:** Entrepreneurial intention positively influences crowdfunding intention of students

#### Blockchain technology as moderator:

Blockchain is a public, secure and transparent open system distributed ledger (Festa et al., 2022). Blockchain technology serves as a framework for developing financial services aimed at addressing various deficiencies in the

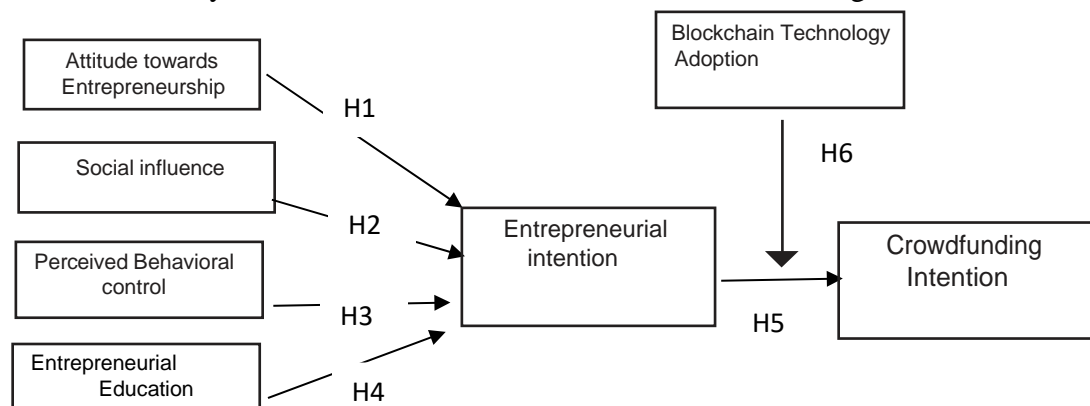


Figure 1: Conceptual Framework

whatsoever. Understanding funding methods is essential for entrepreneurs, as it constitutes a fundamental aspect of entrepreneurship research (Short et al., 2017). crowdfunding platforms assist growth-oriented entrepreneurs in securing funding while simultaneously commercializing their products or services in the marketplace (Brem et al., 2019). In most of developed countries, crowdfunding is now a new source of capital. Crowdfunding plays an important role

current virtual market system (Wang et al., 2022). In the contemporary digital landscape, Blockchain is recognized as a valuable instrument in digital finance due to the significant advantages it offers (Vaig et al., 2023). Blockchain is transforming entrepreneurship by democratizing access to financial services and enhancing understanding of production stages and business products (Hasan et al., 2023). Consequently, essential

resources, including finance, capital, and marketing for business operations, are exclusively supplied via the Blockchain platform. The use of emerging technologies such as Blockchain can contribute to increasing the efficiency of business operations, companies can exploit and innovate to develop products, services, and business processes that both capitalize on these new capabilities and help create new opportunities and breakthroughs (Festa et al., 2022, Hua et al., 2019). This development significantly contributes to global financial regulation and distribution. Furthermore, Blockchain enhances transparency and trust in relationships between entrepreneurs and potential investors and make an easy decision for entrepreneurs to use crowdfunding for their business (Wang et al., 2022; Morkunas et al., 2019). Comprehending the aforementioned advantages of Blockchain encourages entrepreneurs to engage in business initiation through crowdfunding as a source of capital. Vaig et al. (2023). Blockchain literacy can increase the perception of the entrepreneur's ability to control the process of financing for business. Increased knowledge of blockchain performance enhances entrepreneurial intention to utilise crowdfunding as a financial source.(Festa et al., 2022). The proposed hypothesis is stated as follows:

**H6:** Blockchain literacy moderates the relationship between entrepreneurial intention and crowdfunding Intention.

#### **Research methodology:**

This study employs a quantitative survey adapted from previous research (Ajzen, 1991; Krueger et al., 2000; Autio et al., 2001; Ariff et al., 2010). Baruch and Holtom (2008) indicate that a survey questionnaire can yield insights into individual perceptions and intentions (p.1140).

Furthermore, Babbie (1990) asserted that quantitative perceptual research utilizing Likert response scales yields more reliable data compared to alternative methods, due to the extensive range of answer options available to respondents (Oppenheim, 1992, p. 200). This strategy is prevalent in entrepreneurship

research (Ajzen, 1991; Linan and Chen, 2009). The adapted questionnaire was developed based on model variables including attitude towards behaviour, subjective norms (social influence), perceived behavioral control, entrepreneurial education, entrepreneurial intention, blockchain technology, and crowdfunding intention. The constructs of attitude and PBC were derived from Nguyen et al. (2019), social influence from Islam and Khan (2021), entrepreneurial education was taken from Yeng and Ahmad (2012), entrepreneurial intentions from Liñán and Chen (2009) and crowdfunding intentions from Baber (2020). The data was analyzed using a PLS-SEM approach with Smart PLS 3.2 software. It offers comprehensive coverage of various situations while being efficient in terms of time and cost. A random sample was drawn from students enrolled in public sector universities in Pakistan, particularly in Punjab. The researcher employed item response theory to ascertain the sample size for the study, given the uncertainty regarding the population. This hypothesis posits that the total number of items in the questionnaire is multiplied by a factor of 10, as per the formula proposed by Wauters et al. (2010). The objective of this inquiry was to obtain a sample size of 290. This study involved the distribution of 400 questionnaires to respondents through a random sampling method. Out of these, 330 responses were obtained. Twenty questionnaires were deemed incomplete and subsequently excluded from the analysis. A total of 300 responses were employed for analysis utilising Smart PLS. The response rate was 82%. The selected sample size, determined through previous research in the same domain, is considered adequate for quantitative investigations. If the sample size is sufficiently large, the findings are expected to provide an accurate portrayal of the population. Achieving this requires ensuring a sufficient number of participants.

#### **Results and analysis:**

The assessment of factor loadings for all seven constructs is presented in Table 1. All the values of factor loading exceed the minimum value of 0.70 (Hair et al., 2019). Reliability of items was

checked by using composite reliability and

*Table 1: Measurement Model*

Construct	Item Code	Factor Loading	Cronbach's Alpha	CR	AVE CR
Entrepreneurial education	EE1	0.794	0.654	0.803	0.579
	EE2	0.887			
	EE3	0.686			
Blockchain Technology adoption	BLC1	0.862	0.718	0.818	0.531
	BLC2	0.731			
	BLC3	0.765			
	BLC4	0.751			
Crowdfunding Intentions	BICF1	0.846	0.849	0.909	0.769
	BICF2	0.908			
	BICF3	0.876			

*Table 2: Fornell- Larcker Criteria*

Construct	Item Code	Factor Loading	Cronbach's Alpha	CR	AVE CR
Attitude	ATT1	0.763	0.868	0.904	0.653
	ATT2	0.859			
	ATT3	0.779			
	ATT4	0.827			
	ATT5	0.810			
Social influence	SN1	0.743	0.769	0.862	0.676
	SN2	0.776			
	SN3	0.716			
Perceived behavioral control	PBC1	0.670	0.710	0.821	0.536
	PBC3	0.794			
	PBC5	0.784			
	PBC6	0.690			
Entrepreneurial intentions	EI1	0.749			



	<b>EI2</b>	<b>0.852</b>	<b>0.894</b>	<b>0.919</b>	<b>0.655</b>
	<b>EI3</b>	<b>0.787</b>			
	<b>EI4</b>	<b>0.860</b>			
	<b>EI5</b>	<b>0.802</b>			
	<b>EI6</b>	<b>0.801</b>			

Cronbach's alpha measures. The majority of values exceeded 0.7, the recommended standard, with the exception of PBC2 and PBC4, which

were subsequently excluded from further analysis. Almost all other items exhibited values near 0.7; nonetheless, these were considered acceptable, and the data's reliability was validated (Hair et al., 2019). The convergent validity of the data was assessed by measuring the average variance extracted (AVE), with all values exceeding the acceptable threshold of 0.50 (Hair et al., 2019). The confirmation AVE

indicates that items accurately reflect the construct they are intended to measure.

To assess the divergent validity of the items more thoroughly, the Fornell-Larcker criteria were applied, as illustrated in Table 2. Divergent validity indicates that each item assesses a distinct construct, separate from the other items. The square root of all AVEs exceeds the correlation between constructs, thereby confirming the establishment of divergent validity (Fornell and Larcker, 1981).

Table 3: Fornell-Larcker Criteria

Constructs	(AT)	(SI)	(PBC)	(EI)	(EE)	(BCA)	(CI)
Attitude	0.807						
Social Influence	0.512	0.812					
Perceived behavioral control (PBC)	0.558	0.433	0.733				
Entrepreneurial intentions (EI)	0.708	0.426	0.584	0.819			
Entrepreneurial education (EE)	0.494	0.388	0.365	0.570	0.762		
Blockchain Technology adoption (BCA)	0.165	0.186	0.288	0.169	0.277	0.729	
Crowdfunding intentions (CI)	0.127	0.039	0.375	0.314	0.166	0.31	0.878

### Hypothesis testing:

The proposed relationships were examined, and all of the suggested connections in the structural model received support. The data indicates a significant positive relationship between attitude and entrepreneurial intentions (EI) ( $\beta$ : 0.450). Additionally, perceived behavioural control shows a negative impact on EI ( $\beta$ : -0.103), while social influence also contributes positively to EI ( $\beta$ : 0.217). Furthermore, entrepreneurial education has a positive

effect on EI ( $\beta$ : 0.265). The adoption of blockchain technology is positively associated with crowdfunding intentions ( $\beta$ : 0.277), and there is a notable positive correlation between EI and crowdfunding intentions ( $\beta$ : 0.260). All path coefficients demonstrate statistical significance at the 1% level, as indicated in Table 3. Consequently, we acknowledge the validity of all our hypotheses. Crowdfunding intention has an R<sup>2</sup> value of 0.160 and entrepreneurial intention is 0.603. This indicates that entrepreneurial education and the three TPB

components together explain 60% of the variation in entrepreneurial inclinations. Crowdfunding intention's low R<sup>2</sup> rating suggests that additional factors influence

individuals' intentions regarding this fundraising method, warranting further exploration in future research

Table 4: Estimated Path Relationships

H#	Direct Relations	$\beta$	T-Values	P Values	F <sup>2</sup>	Remarks
H1	Attitude -> EI	0.254	5.33	0.000	0.084	Supported
H2	Social Influence -> EI	0.142	2.442	0.015	0.027	Supported
H3	Perceived behavioral control -> EI	-0.103	1.919	0.056	0.016	Supported**
H4	Entrepreneurial Education -> EI	0.368	8.154	0.000	0.179	Supported
H5	EI -> Crowdfunding intentions	0.126	2.569	0.010	0.021	Supported
	<b>Indirect Relationships</b>					
	Attitude -> EI -> CI	0.032	2.358	0.019		Supported
	Social Influence EI CI	0.018	1.740	0.083		Supported** *
	Perceived behavioral control -> EI-> CI	-0.013	1.533	0.126		Not-Supported
	Entrepreneurial Education -> EI-> CI	0.046	2.393	0.017		Supported

Supported but negative at 10 % significance level. \*\* Supported at 10 % significance level.

EI= Entrepreneurial intentions; CI= Crowdfunding intentions

### Moderating role of block chain technology adoption;

Table 5: Moderating Effect

Table 5: Moderating Effect					
H#	Path	Original Sample (O)	T Statistics ( O/Stdev )	P Values	Comments
H6	BCA x EI -> CFI	0.254	6.951	0.00	Supported

The p value suggested that blockchain technology will help people to adopt crowdfunding more easily. Fintech now helps entrepreneurs to collect funds and make payment ways very easy. It means in presence of block chain technology adoption , entrepreneurial intention will impact crowdfunding intention in positive way (Nguyen and Dao, et al., 2024). Previous researches does support that fintech have positive impact on crowdfunding success. In this research,

proposed model, with minor exceptions. Thus, the Theory of Planned Behaviour demonstrates its utility in elucidating entrepreneurial intentions among students of Pakistan. The current study identifies attitude towards entrepreneurship as a definitive element of the Theory of Planned Behaviour, applicable to Pakistan. Similar findings were reported by Al-Jubari et al. (2019), Fragoso et al. (2020), Gieure et al. (2019), Munir et al. (2019), Nguyen et al. (2019), Bau-boniene et al. (2018), and Esfandiar et al. (2019). This conclusion would categorise Romania and Korea as non-collectivist countries (Siu and Lo, 2011), although this assertion requires validation through future research. PBC is negatively correlated with EIs, which contradicts our assumption. The perception of non-feasibility does not deter business students from contemplating entrepreneurship, suggesting a relatively lower risk aversion. Our findings align with the conclusions of Esfandiar et al. (2019), indicating correlation between SIs and

blockchain technology adoption has been used as a moderator in Pakistani context and it fully moderates the relationship between EI and CI.

### Discussion

An optimistic outlook on entrepreneurship is a critical factor for those aspiring to become entrepreneurs. This research established the connection between the two, as indicated by previous studies (Al-Jubari et al., 2019; Doanh and Bernat, 2019). The study validates the

EI. Attitudes towards entrepreneurship in a society that promotes it likely have a greater influence on students' decisions than formal education Lee et al. (2005) indicated that entrepreneurial education significantly enhanced the recognition of its importance among Pakistani students who completed the course. The hypothesis is examined for the entire sample, as previously documented by Bauboniene et al. (2018), Gieure et al. (2019), Ndofirepi (2020), Nguyen et al. (2019), and Wegner et al. (2020).

The correlation between social influence and entrepreneurial intention has been debated and is found to be less robust than other components in the Theory of Planned Behavior (TPB). This study demonstrates a substantial correlation between social influence and entrepreneurial intention, consistent with the results of Doanh and Bernat (2019) and Al-Jubari et al. (2019). The impact of family and friends influences entrepreneurial inclinations among management students, suggesting that their decision to engage in entrepreneurship is

autonomous and individualistic. Perceived behavioral control adversely affects entrepreneurial ambitions, suggesting that students who are self-assured in their capabilities yet hesitant to engage in business management exhibit increased aspirations to become entrepreneurs in the contemporary context of Pakistan. The results of this study validate earlier research (Liñán and Chen, 2009; Munir et al., 2019; Al-Jubari et al., 2019; Doanh and Bernat, 2019). Entrepreneurial education favorably affects entrepreneurial inclinations, aligning with the conclusions of Li and Wu (2019) and Sriyakul and Jermsittiparsert (2019). This highlights the imperative of integrating entrepreneurial education within management course curricula, a factor that university and college officials must recognize. Entrepreneurial education improves business performance by enhancing profitability, idea development, decision-making, and sustainability (Ho et al., 2018). Modern entrepreneurship education necessitates thorough execution to fulfill its aims (Gangi, 2017). Blockchain technology adoption plays a significant role for people who intend to be an entrepreneur and want to use crowdfunding as source of capital.

### Research Implications

This study provides significant insights into the entrepreneurial intentions of university students and underscores the critical role of entrepreneurial education in universities for nurturing these intentions. The study will aid curriculum developers in understanding the importance of educational programs that provide knowledge about business and the procurement of funds through alternative financial methods. The study will provide valuable insights to crowdfunding platforms, enabling them to grasp the essential support needed by project owners and assist emerging entrepreneurs in reaching their funding objectives. The study offers insights into the theory by indicating that perceived behaviour control does not affect university students' aspirations to become entrepreneurs, given the prevailing political and economic conditions in Pakistan. The adoption of blockchain technology will enable

students to secure capital from the public more effectively, thereby reinforcing their aspirations to become entrepreneurs. Future studies ought to consider additional factors that influence the adoption of crowdfunding as a means for aspiring entrepreneurs to raise funds.

### Conclusions

In the context of Pakistan, this study holds considerable importance due to the nation's expanding youth demographic and the rising emphasis on entrepreneurship as a catalyst for economic development. Management students in Pakistan frequently encounter obstacles, including restricted access to funding, insufficient entrepreneurial training, and immature financial ecosystems. Nonetheless, the influence of entrepreneurial education and a favourable disposition towards entrepreneurship has been identified as crucial in determining the intentions of these students to embark on a career in entrepreneurship. Crowdfunding presents a significant opportunity in Pakistan as an alternative finance mechanism, particularly in a landscape where traditional financing options, like bank loans, frequently remain out of reach for startups due to rigorous requirements and elevated interest rates. Crowdfunding platforms offer a novel approach that allows aspiring entrepreneurs to secure funding directly from the public. This method enhances access to funding while enabling startups to engage with prospective customers, thereby validating their business concepts at an early stage.

The findings indicate that when crowdfunding platforms in Pakistan provide a supportive and facilitating environment—characterized by transparency, trust, and ease of use—students are more inclined to engage with these platforms to secure funding for their projects. This supportive environment is essential for instilling confidence in young entrepreneurs, enabling them to utilise crowdfunding as a practical financing option. The implementation of blockchain technology has the potential to significantly improve the transparency, security, and efficiency of crowdfunding platforms, thereby reinforcing this relationship. Blockchain facilitates

unchangeable record-keeping, secure transactions, and the execution of smart contracts, effectively tackling prevalent issues associated with fraud, mismanagement, and inefficiency in conventional crowdfunding models. Implementing blockchain technology can enhance trust between investors and entrepreneurs on crowdfunding platforms in Pakistan, thereby making the fundraising process more dependable and appealing. Furthermore, the implementation of blockchain technology has the potential to motivate entrepreneurial aspirations within the realm of management students. The incorporation of blockchain-driven crowdfunding platforms allows backers to monitor the allocation of their contributions, promoting transparency and motivating increased investments. This increased level of trust can inspire students to engage in entrepreneurship with more assurance, understanding that blockchain-supported crowdfunding systems offer a solid foundation for funding their projects. In summary, the findings indicate that entrepreneurial education, attitudes towards entrepreneurship, and the adoption of blockchain technology play a crucial role in shaping entrepreneurial intentions and the use of crowdfunding among management students in Pakistan. It is essential for policymakers, educators, and platform developers to collaborate in order to create a supportive ecosystem that effectively integrates blockchain technology into crowdfunding platforms. This integration will significantly enhance the capabilities of aspiring entrepreneurs while fostering a sustainable entrepreneurial culture in Pakistan.

## References

- Ajzen, I. (2002): Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality and Social Psychology Review*, Vol. 6, No. 2, pp.107-122.
- Al-Jubari, I., Hassan, A. and Liñán, F. (2019): Entrepreneurial intention among University students in Malaysia: Integrating self-determination theory and the theory of planned behavior. *International Entrepreneurship and Management Journal*, Vol. 15, No. 4, 1323-1342.
- Al-Jubari, I., Hassan, A., & Linan, F. (2019). Entrepreneurial intention among University students in Malaysia: integrating self-determination theory and the theory of planned behaviour. *International Entrepreneurship and Management Journal*, 15(4), 1323–1342. <https://doi.org/10.1007/s11365-018-0529-0>
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Anton, S.G. and Bostan, I. (2017): The role of access to finance in explaining cross-national variation in entrepreneurial activity: A panel data approach. *Sustainability*, Vol. 9, No.11, pp.1947.
- Baber, H. (2019): Factors underlying attitude formation towards crowdfunding in India. *International Journal of Financial Research*, Vol. 10, No. 4, pp.46-54.
- Baber, H. (2020): Intentions to participate in political crowdfunding-from the perspective of civic voluntarism model and theory of planned behavior. *Technology in Society*, Vol. 63, No. 4, pp.101435.
- Baber, H. and Fanea-Ivanovici, M. (2021): Motivations behind backers' contributions in reward-based crowdfunding for movies and web series. *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-01-2021-0073>
- Belhadi, A., Touriki, F.E. and Elfezazi, S. (2019): Evaluation of critical success factors (CSFs) to lean implementation in SMEs using AHP. *International Journal of Lean Six Sigma*, Vol. 10, No. 3, pp.803-829.
- Brem, A., Bilgram, V. and Marchuk, A. (2019): How crowdfunding platforms change the nature of user innovation—from problem solving to entrepreneurship. *Technological Forecasting and Social Change*, Vol. 144, pp.348-360.
- Bruton, G., Khavul, S., Siegel, D. and Wright, M. (2015): New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer-to-peer innovations. *Entrepreneurship Theory and Practice*, Vol. 39, No. 1, pp.9-26.
- Baber, H., & Fanea-Ivanovici, M. (2021). Motivations behind backers' contributions in reward-based crowdfunding for movies and web series. *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-01-2021-0073>.
- Baber, H. (2020). Intentions to participate in political crowdfunding-from the perspective of civic voluntarism model and theory of planned behavior. *Technology in Society*, 63, 101435. <https://doi.org/10.1016/j.techsoc.2020.101435>
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship Theory*

*and Practice*, 38(2), 217–254.  
<https://doi.org/10.1111/2Fetap.12095>

Bauboniene, Z., Hahn, K. H., Puksas, A., & Malinauskiene, E. (2018). Factors influencing student entrepreneurship intentions: the case of Lithuanian and South Korean universities. In M. Tvaronavičiene (Ed.), *Entrepreneurship and Sustainability Issues*, Entrepreneurship and Sustainability Center, 6(2), 854–871.  
[https://doi.org/10.9770/jesi.2018.6.2\(26\)](https://doi.org/10.9770/jesi.2018.6.2(26))

Bewley, A., Burrage, D. M., Ersser, S. J., Hansen, M., & Ward, C. (2014). Identifying individual psychosocial and adherence support needs in patients with psoriasis: a multinational two-stage qualitative and quantitative study. *Journal of the European academy of dermatology and venereology*, 28(6), 763-770.  
<https://doi.org/10.1111/jdv.12174>

Boeuf, B., Darveau, J., & Legoux, R. (2014). Financing creativity: Crowdfunding as a new approach for theatre projects. *International Journal of Arts Management*, 16(3), 33–48.

Burtch, G., Ghose, A., & Wattal, S. (2016). Secret Admirers: An Empirical Examination of Information Hiding and Contribution Dynamics in Online Crowdfunding. *Information Systems*

Busse, V. (2018). Crowdfunding – An Empirical Study on the Entrepreneurial Viewpoint. *Advances in Intelligent Networking and Collaborative Systems*, Springer International Publishing, 306–318.  
[https://doi.org/10.1007/978-3-319-98557-2\\_28](https://doi.org/10.1007/978-3-319-98557-2_28)

Cheah, J. H., Thurasamy, R., Memon, M. A., Chuah, F., & Ting, H. (2020). Multigroup Analysis using SmartPLS: Step-by-Step Guidelines for Business Research. *Asian Journal of Business Research Volume*, 10(3), 1–19,  
<https://DOI.org/10.14707/ajbr.200087>

Chong, A. Y. L. (2013). Predicting m-commerce adoption determinants: A neural network approach. *Expert Systems with*

*Applications*, 40 (2), 523–530.  
<https://doi.org/10.1016/j.eswa.2012.07.068>

De Clercq, D., Honig, B., & Martin, B. (2012). The roles of learning orientation and passion for work in the formation of entrepreneurial intention. *International Small Business Journal: Researching Entrepreneurship*, 31(6), 652–676.  
<https://doi.org/10.1177%2F0266242611432360>

Carbonara, N. (2020): The role of geographical clusters in the success of reward-based crowdfunding campaigns. *The International Journal of Entrepreneurship and Innovation*, Vol. 22, No. 1, pp.18-32.

Carsrud, A. and Brännback, M. (2011): Entrepreneurial motivations: what do we still need to know? *Journal of Small Business Management*, Vol. 49, No. 1, pp.9-26.

De Buysere, K., Gajda, O., Kleverlaan, R., Marom, D. and Klaes, M. (2012): A framework for European crowdfunding. Available at:  
<http://www.crowdfundingframework.eu/>

Doanh, D.C. and Bernat, T. (2019): Entrepreneurial self-efficacy and intention among Vietnamese students: A meta-analytic path analysis based on the theory of planned behavior. *Procedia Computer Science*, Vol. 159, pp.2447-2460.

Esfandiar, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (2019). Understanding entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research*, 94, 172–182.  
<https://doi.org/10.1016/j.jbusres.2017.10.045>

European Commission (n.d.). Crowdfunding. Available from internet:

[https://ec.europa.eu/info/business-economy-euro/growth-and-investment/financing-investment/crowdfunding\\_en](https://ec.europa.eu/info/business-economy-euro/growth-and-investment/financing-investment/crowdfunding_en)

Fanea-Ivanovici, M. (2018). Transparency of Financial Information on Crowdfunding Platforms – A Prerequisite for Successful Funding Campaigns. In International Conference KNOWLEDGE-BASED ORGANIZATION, Walter de Gruyter GmbH, 24 (2), 37–42. <https://doi.org/10.1515/kbo-2018-0063>

Farrukh, M., Lee, J. W. C., Sajid, M., & Waheed, A. (2019). Entrepreneurial intentions: The role of individualism and collectivism in perspective of theory of planned behaviour. *Education + Training*, 61 (7/8), 984–1000. <https://doi.org/10.1108/ET-09-2018-0194>

Fayolle, A., & Gailly, B. (2013). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence. *Journal of Small Business Management*, 53 (1), 75–93. <https://doi.org/10.1111/jsbm.12065>

Elali, W., and Al-Yacoub, B. (2016): Factors affecting entrepreneurial intentions among Kuwaitis. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 12, No. 1, pp.18-34.

Farooq, M.S. (2018): Modelling the significance of social support and entrepreneurial skills for determining entrepreneurial behaviour of individuals. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 14, No. 3, pp.242-266.

Farrukh, M., Lee, J.W.C., Sajid, M. and Waheed, A. (2019): Entrepreneurial intentions: The role of individualism and collectivism in perspective of theory of planned behaviour. *Education + Training*, Vol. 61, Nos 7/8, pp.984-100

Fornell, C. and Larcker, D.F. (1981): Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, Vol. 18, No. 1, pp.39-50.

Gangi, Y.A. (2017): The role of entrepreneurship education and training on creation of the knowledge economy. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 13, No. 4, pp.375-388.

Gerber, E.M., Hui, J.S. and Kuo, P.Y. (2012): Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms. In *Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics*, Vol. 2, No. 11, p.10.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019): When to use and how to report the results of PLS- SEM. *European Business Review*, Vol. 31, No. 1, pp.2-24.

Ho, M.H.R., Uy, M.A., Kang, B.N. and Chan, K.Y. (2018). Impact of entrepreneurship training on entrepreneurial efficacy and alertness among adolescent youth. In *Frontiers in Education*, Vol. 3. Available at <https://doi.org/10.3389/feduc.2018.00013>

Hockerts, K. (2017): Determinants of social entrepreneurial intentions. *Entrepreneurship Theory and Practice*, Vol. 41, No. 1, pp.105-130.

Iakovleva, T., Kolvereid, L., Gorgievski, M. and Sorhaug, O. (2014): Comparison of perceived barriers to entrepreneurship in Eastern and Western European countries. *International Journal of Entrepreneurship and Innovation Management*, Vol. 18, Nos 2-3, pp.115-133.

Islam, M.T. and Khan, M.T.A. (2019): Factors influencing the adoption of



crowdfunding in Bangladesh: A study of start-up entrepreneurs. *Information Development, SAGE Publications*, Vol. 37, No. 1, pp.72-89. Jena, R.K. (2020): Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, Vol. 107, 106275.

<https://doi.org/10.1016/j.chb.2020.106275>

Kelley, D.J., Bosma, N. and Amorós, J.E. (2011): *Global Entrepreneurship Monitor 2010 Global Report*, Babson Park, MA: Babson College und Santiago, Chile: Universidad del Desarrollo.

Kim, H. and De Moor, L. (2017): The case of crowdfunding in financial inclusion: A survey. *Strategic Change*, Vol. 26, No. 2, pp.192-212.

Kim, M.J. and Hall, C.M. (2020): What drives visitor economy crowdfunding? The effect of digital storytelling on unified theory of acceptance and use of technology. *Tourism Management Perspectives*, Vol. 34, 100638.

<https://doi.org/10.1016/j.tmp.2020.100638>

Kirby, E. and Worner, S. (2014): Crowdfunding: An infant industry growing fast. *IOSCO Research Department*, pp.1-62. [accessed 04.04.2021] <http://www.iosco.org/research/pdf/swp/Crowd-funding-An-Infant-Industry-Growing-Fast.pdf>

Kolvereid, L. and Isaksen, E. (2006): New business start-up and subsequent entry into self-employment.

*Journal of Business Venturing*, Vol. 21, Nos 6, pp.866-885.

Krueger Jr, N.F., Reilly, M.D. and Carsrud, A.L. (2000): Competing models of entrepreneurial intentions.

*Journal of Business Venturing*, Vol. 15, Nos 5-6, pp.411-432.

Krueger, A.B. (Ed.) (2009): *Measuring the Subjective Well-Being of Nations: National Accounts of Time Use and Well-Being*. University of Chicago Press.

Li, L. and Wu, D. (2019): Entrepreneurial education and students' entrepreneurial intention: Does team cooperation matter? *Journal of Global Entrepreneurship Research*, Vol. 9, No. 1, pp.1-13.

Liñán, F. and Chen, Y.W. (2009): Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, Vol. 33, No. 3, pp.593-617.

Mahendra, A.M., Djatmika, E.T. and Hermawan, A. (2017): The effect of entrepreneurship education on entrepreneurial intention mediated by motivation and attitude among management students, State University of Malang, Indonesia. *International Education Studies*, Vol. 10, No. 9, pp.61-69.

Matshekga, M. and Urban, B. (2013): The importance of the human capital attributes when accessing financial resources. *Journal of Contemporary Management*, Vol. 10, No.1, pp.259-278.

Mohamad, N., Lim, H.E., Yusof, N. and Soon, J.J. (2015): Estimating the effect of entrepreneur education on graduates' intention to be entrepreneurs. *Education + Training*, Vol. 57, Nos 8/9, pp.874-890.

Munir, H., Jianfeng, C. and Ramzan, S. (2019): Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing

country. *International Journal of Entrepreneurial Behavior & Research*, Vol. 25, No. 3, pp.554-580.

Nguyen, A.T., Do, T.H.H., Vu, T.B.T., Dang, K.A. and Nguyen, H.L. (2019): Factors affecting entrepreneurial intentions among youths Vietnam. *Children and Youth Services Review*, Vol. 99, pp.186-193.

Pradhan, R.P., Arvin, M.B., Nair, M. and Bennett, S.E. (2020): The dynamics among entrepreneurship, innovation, and economic growth in the Eurozone countries. *Journal of Policy Modeling*, Vol. 42, No. 5, pp.1106-1122.

Roy, R., Akhtar, F. and Das, N. (2017): Entrepreneurial intention among science & technology students in India: extending the theory of planned behavior. *International Entrepreneurship and Management Journal*, Vol. 13, No. 4, pp.1013-1041.

Shah, N. and Soomro, B.A. (2017): Investigating entrepreneurial intention among public sector university students of Pakistan. *Education + Training*, Vol. 59, Nos 7/8, pp.841-855.

Short, J.C., Ketchen Jr, D.J., McKenny, A.F., Allison, T.H. and Ireland, R.D. (2017): Research on crowdfunding: Reviewing the (very recent) past and celebrating the present. *Entrepreneurship Theory and Practice*, Vol. 41, No. 2, pp.149-160.

Siu, W.S. and Lo, E.S.C. (2013): Cultural contingency in the cognitive model of entrepreneurial intention.

*Entrepreneurship Theory and Practice*, Vol. 37, No. 2, pp.147-173.

Smith, S., Hamilton, M. and Fabian, K. (2020): Entrepreneurial drivers, barriers and enablers of computing students: gendered perspectives from an

Australian and UK university. *Studies in Higher Education*, Vol. 45, No. 9, pp.1892-1905.

Sriyakul, T. and Jermsittiparsert, K. (2019): The mediating role of entrepreneurial passion in the relationship between entrepreneur education and entrepreneurial intention among university students in Thailand. *International Journal of Innovation, Creativity and Change*, Vol. 6, No. 10, pp.193-212.

Stoica, O., Roman, A. and Rusu, V.D. (2020): The nexus between entrepreneurship and economic growth: A comparative analysis on groups of countries. *Sustainability*, Vol. 12, No. 3, pp.1186.

Cheah, J. H., Thurasamy, R., Memon, M. A., Chuah, F., & Ting, H. (2020). Multigroup Analysis using SmartPLS: Step-by-Step Guidelines for Business Research. *Asian Journal of Business Research Volume*, 10(3), 1–19, <https://doi.org/10.14707/ajbr.200087>

Chong, A. Y. L. (2013). Predicting m-commerce adoption determinants: A neural network approach. *Expert Systems with Applications*, 40 (2), 523–530. <https://doi.org/10.1016/j.eswa.2012.07.068>

De Clercq, D., Honig, B., & Martin, B. (2012). The roles of learning orientation and passion for work in the formation of entrepreneurial intention. *International Small Business Journal: Researching Entrepreneurship*, 31(6), 652–676. <https://doi.org/10.1177/0266242611432360>

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error.

*Journal of Marketing Research*, 18(1), p. 39. <https://doi.org/10.2307/3151312>

Fragoso, R., Rocha-Junior, W., & Xavier, A. (2019). Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business & Entrepreneurship*, 32 (1), 33–57. Festa, G., Elbahri, S., Cuomo, M. T., Ossorio, M., & Rossi, M. (2023). FinTech ecosystem as influencer of young entrepreneurial intentions: empirical findings from Tunisia. *Journal of Intellectual Capital*, 24(1), 205-226.

Panitkulpong, K., Saengnoee, A., & Teerawatananond, T. (2024). Financial Innovation and Crowdfunding: Influencing Investment Decisions in Tech Startups. *International Journal of Financial Studies*, 12(4), 103.

<https://doi.org/10.1080/08276331.2018.1551459>

Giacomin, O., Janssen, F., Pruett, M., Shinnar, R. S., Llopis, F., & Toney, B. (2011). Entrepreneurial intentions, motivations and barriers: Differences among American, Asian and European students. *International Entrepreneurship and Management Journal*, 7(2), 219-238. <https://doi.org/10.1007/s11365-010-0155-y>

Gieure, C., Benavides-Espinosa, M. del M., & Roig-Dobon, S. (2019). Entrepreneurial intentions in an international university environment. *International Journal of Entrepreneurial Behavior & Research*, 25(8), 1605–1620. <https://doi.org/10.1108/IJEER-12-2018-0810>

Hair, J. F., Jr., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European*

*Business Review*, 31 (1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications. <https://doi.org/10.1007/978-3-030-80519-7>

Henseler, J., Ringle, C. M., & Sarstedt, M. (2016a). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405-431. <https://doi.org/10.1108/IMR-09-2014-0304>

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>

Henseler, J., Hubona, G., & Ray, P. A. (2016b). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <https://doi.org/10.1108/IMDS-09-2015-0382>

Ho, M. H. R., Uy, M. A., Kang, B. N. Y., & Chan, K. Y. (2018). Impact of Entrepreneurship Training on Entrepreneurial Efficacy and Alertness among Adolescent Youth. *Frontiers in Education*, Frontiers Media SA, 3. <https://doi.org/10.3389/educ.2018.00013>

Hossain, M., & Oparaocha, G. O. (2017). Crowdfunding: Motives, definitions, typology and ethical challenges. *Entrepreneurship Research Journal*, 7(2). <https://doi.org/10.1515/erj-2015-0045>

Islam, M. T., & Khan, M. T. A. (2019). Factors influencing the adoption of crowdfunding in Bangladesh: A study of start-up entrepreneurs. *Information Development*, 37(1), 72–89.

<https://doi.org/10.1177%2F0266666919895554>

Jena, R. K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 106275. <https://doi.org/10.1016/j.chb.2020.106275>

Jones, P., Jones, A., Packham, G., & Miller, C. (2008). Student attitudes towards enterprise education in Poland: a positive impact. In Nabi, G. (Ed.) *Education + Training*, Emerald, 50 (7), pp. 597–614. <https://doi.org/10.1108/00400910810909054>

Kang, M., Gao, Y., Wang, T., & Zheng, H. (2016). Understanding the determinants of funders' investment intentions on crowdfunding platforms. *Industrial Management & Data Systems*, 116(8), 1800–1819. <https://doi.org/10.1108/IMDS-07-2015-0312>

Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., & Mulder, M. (2014). The Impact of Entrepreneurship Education: A Study of Iranian Students' Entrepreneurial Intentions and Opportunity Identification. *Journal of Small Business Management*, 54(1), 187–209. <https://doi.org/10.1111/jsbm.12137>

Khalilzadeh, J., Ozturk, A. B., & Bilgihan, A. (2017). Security-related factors in extended UTAUT model for NFC based mobile payment in the restaurant industry. *Computers in Human Behavior*, 70, 460–474. <https://doi.org/10.1016/j.chb.2017.01.001>

Khurshed, A., Mustafa, F., Fatima, M., & Siddique, F. (2018). Entrepreneurial Intentions: Gem Based Empirical Analysis on the Northern Europe and Asian Countries. *International Journal of Entrepreneurial Knowledge*, University College of Business in Prague, 6 (2). <https://doi.org/10.37335/ijek.v6i2.78>

Kim, M. J., Bonn, M., & Lee, C. K. (2019). The effects of motivation, deterrents, trust, and risk on tourism crowdfunding behav-

ior. *Asia Pacific Journal of Tourism Research*, 25(3), 244–260. <https://doi.org/10.1080/10941665.2019.1687533>

Kim, M. J., & Hall, C. M. (2020). What drives visitor economy crowdfunding? The effect of digital storytelling on unified theory of acceptance and use of technology. *Tourism Management Perspectives*, 34, 100638. <https://doi.org/10.1016/j.tmp.2020.100638>

Kim, M. J., Hall, C. M., & Kim, D. K. (2020). Why do investors participate in tourism incentive crowdfunding? The effects of attribution and trust on willingness to fund. *Journal of Travel & Tourism Marketing*, 37(2), 141–154. <https://doi.org/10.1080/10548408.2020.172278>

Mina Fanea-Ivanovici, Hasnan Baber. *The Role of Entrepreneurial Intentions, Perceived Risk and Perceived Trust in...*

Kock, N. (2020). Using indicator correlation fit indices in PLS-SEM: Selecting the algorithm with the best fit. *Data Analysis Perspectives Journal*, 1(4), 1-4.

Krueger, N. F., JR, Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)

Kuselias, S. (2020). Follow the Crowd: How Social Information and Social Identity Influence Investing Decisions. *Abacus*, 56(3), 407–435. <https://doi.org/10.1111/abac.12188>

Laguia, A., Moriano, J. A., & Gorgievski, M. J. (2019). A psychosocial study of self-perceived creativity and entrepreneurial intentions in a sample of university students. *Thinking Skills and Creativity*, 31, 44–57. <https://psycnet.apa.org/doi/10.1016/j.tsc.2018.11.004>

- Lee, S. M., Chang, D., & Lim, S. B. (2005). Impact of entrepreneurship education: A comparative study of the US and Korea. *The international entrepreneurship and management journal*, 1(1), 27-43. <https://doi.org/10.1007/s11365-005-6674-2>
- Linan, F., & Chen, Y. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617. <https://doi.org/10.1111%2Fj.1540-6520.2009.00318.x>
- Meoli, A., Fini, R., Sobrero, M., & Wiklund, J. (2020). How entrepreneurial intentions influence entrepreneurial career choices: The moderating influence of social context. *Journal of Business Venturing*, 35(3), 105982. <https://doi.org/10.1016/j.jbusvent.2019.105982>
- Mhango, M. W. (n.d.). Assessing entrepreneurial career intentions of family and consumer sciences students in higher education: a model testing approach. Iowa State University. <https://doi.org/10.31274/rtd-180813-9928>
- Moon, Y., & Hwang, J. (2018). Crowdfunding as an Alternative Means for Funding Sustainable Appropriate Technology: Acceptance Determinants of Backers. *Sustainability*, 10(5), 1456. <https://doi.org/10.3390/su10051456>
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2011). A Cross-Cultural Approach to Understanding Entrepreneurial Intention. *Journal of Career Development*, 39(2), 162-185. <https://doi.org/10.1177%2F0894845310384481>
- Munir, H., Jianfeng, C., & Ramzan, S. (2019). Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal of Entrepreneurial Behavior & Research*, 25(3), 554-580. <https://doi.org/10.1108/IJEBR-05-2018-0336>
- Ndofirepi, T. M. (2020). Relationship between entrepreneurship education and entrepreneurial goal intentions: psychological traits as mediators. *Journal of Innovation and Entrepreneurship*, Springer Science and Business Media LLC, 9 (1). <https://doi.org/10.1186/s13731-020-0115-x>
- Nguyen, T. T., Dao, T. T., Tran, T. B., Nguyen, H. T. T., Le, L. T. N., & Pham, N. T. T. (2024). Fintech literacy and digital entrepreneurial intention: Mediator and Moderator Effect. *International Journal of Information Management Data Insights*, 4(1), 100222.
- Nguyen, A. T., Do, T. H. H., Vu, T. B. T., Dang, K. A., & Nguyen, H. L. (2019). Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review*, 99, 186-193. <https://doi.org/10.1016/j.childyouth.2019.01.039>
- Patil, P., Tamilmani, K., Rana, N. P., & Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. *International Journal of Information Management*, 54, 102144. <https://doi.org/10.1016/j.ijinfomgt.2020.102144>
- Paul, J., Hermel, P., & Srivatava, A. (2017). Entrepreneurial intentions—theory and evidence from Asia, America, and Europe. *Journal of International Entrepreneurship*, 15(3), 324-351. <https://doi.org/10.1007/s10843-017-0208-1>
- Perez-Fernandez, H., Delgado-Garcia, J. B., Martin-Cruz, N., & Rodriguez-Escudero, A. I. (2020). The Role of Affect in the Development of Entrepreneurial Intentions. *Entrepreneurship Research Journal*, 1(ahead-of-print). <https://doi.org/10.1515/erj-2019-0124>
- Rodrigues, M., Silva, R., & Franco, M.

- (2021). Entrepreneurial Attitude and Intention in Higher Education Students: What Factors Matter? *Entrepreneurship Research Journal*. <https://doi.org/10.1515/erj-2020-0107>
- Rodriguez-Ricardo, Y., Sicilia, M., & Lopez, M. (2019). Altruism and Internal Locus of Control as Determinants of the Intention to Participate in Crowdfunding: The Mediating Role of Trust. *Journal of Theoretical and Applied Electronic Commerce Research*, 14(3), 1–16. <http://dx.doi.org/10.4067/S0718-18762019000300102>
- Roibu, I., & Roibu, P. A. (2016). Barriers to women entrepreneurship: a comparative analysis between South Korea and Romania. *Acta Universitatis Sapientiae*, 8 (1), 183–203. <https://doi.org/10.1515/ausp-2016-0013>
- Rossi, A., & Vismara, S. (2018). What do crowdfunding platforms do? A comparison between investment-based platforms in Europe. *Eurasian Business Review*, 8(1), 93–118. <https://doi.org/10.1007/s40821-017-0092-6>
- San Martin, H., Hernandez, B., & Herrero, A. (2020). Social Consciousness and Perceived Risk as Drivers of Crowdfunding as a Socially Responsible Investment in Tourism. *Journal of Travel Research*, 60 (1), 16–30. <https://doi.org/10.1177/0047287519896017>
- Shinnar, R. S., Giacomini, O., & Janssen, F. (2012). Entrepreneurial Perceptions and Intentions: The Role of Gender and Culture.
- Shneor, R., Mrzyglod, U., Adamska-Mieruszewska, J., & Fornalska-Skurczynska, A. (2021). The role of social trust in reward crowdfunding campaigns' design and success. *Electronic Markets*, Springer Science and Business Media LLC. <https://doi.org/10.1007/s12525-021-00456-5>
- Smith, S., Hamilton, M., & Fabian, K. (2019). Entrepreneurial drivers, barriers and enablers of computing students: gendered perspectives from an Australian and UK university. *Studies in Higher Education*, 45(9), 1892–1905. <https://doi.org/10.1080/03075079.2019.1637840>
- Steigenberger, N. (2017). Why supporters contribute to reward-based crowdfunding. *International Journal of Entrepreneurial Behavior & Research*, 23(2), 336–353. <https://doi.org/10.1108/IJEBR-04-2016-0117>
- Stemler, A.R. (2013). The JOBS Act and crowdfunding: Harnessing the power-and money-of the masses. *Business Horizons*, 56(3), 271–275. <https://doi.org/10.1016/j.bushor.2013.01.007>
- Thies, F., Wessel, M., & Benlian, A. (2016). Effects of Social Interaction Dynamics on Platforms. *Journal of Management Information Systems*, 33(3), 843–873. <https://doi.org/10.1080/07421222.2016.1243967>
- Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425. <https://psycnet.apa.org/doi/10.2307/30036540>
- Wegner, D., Thomas, E., Teixeira, E. K., & Maehler, A. E. (2019). University entrepreneurial push strategy and students' entrepreneurial intention. *International Journal of Entrepreneurial Behavior & Research*, 26(2), 307–325. <https://doi.org/10.1108/IJEBR-10-2018-0648>
- Wei, X., Liu, X., & Sha, J. (2019). How Does the Entrepreneurship Education Influence the Students' Innovation? Testing on the Multiple Mediation Model. *Frontiers in Psychology*, Frontiers Media SA, 10. <https://doi.org/10.3389/fpsyg.2019.01557>
- Yang, X., Zhao, K., Tao, X., & Shiu, E. (2019). Developing and Validating a Theory-Based Model of Crowdfunding

Investment Intention-Perspectives from Social Exchange Theory and Customer Value Perspective. *Sustainability*, 11(9), 2525. <https://doi.org/10.3390/su11092525>

Zhao, Q., Chen, C. D., Wang, J. L., & Chen, P. C. (2017). Determinants of backers' funding intention in crowdfunding: Social exchange theory and regulatory focus. *Telematics and Informatics*, 34(1), 370–384. <http://dx.doi.org/10.1016/j.tele.2016.06.006>

Zheng, H., Hung, J.-L., Qi, Z., & Xu, B. (2016). The role of trust management in reward-based crowdfunding. In Wu H. & Guan-dong X. A. (Eds.), *Online Information Review*, 40 (1), 97–118. <http://dx.doi.org/10.1108/OIR-04-2015-0099>

Urban, B. and Ratsimanetrimanana, F. (2019): Access to finance and entrepreneurial intention. *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 13, No. 4, pp.455-471.

Wei, X., Liu, X. and Sha, J. (2019): How does the entrepreneurship education influence the students' innovation?

Testing on the multiple mediation model. *Frontiers in Psychology*, Vol. 10, 10pp.

Yeng, K. and Ahmad, S. (2012): A study among university students in business start-ups in Malaysia: Motivations and obstacles to become entrepreneurs. *International Journal of Business and Social Science*, Vol. 3, No. 19, pp.1