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Muhammad Irfan Muhammad Shaukat Malik Bahauddin Zakariya University, Multan, Pakistan



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The impact of successful intelligence, entrepreneurial personality, and social skills on sustainable entrepreneurship

Muhammad Irfan* 💿

Institute of Banking and Finance Bahauddin Zakariya University, Multan, Pakistan E-mail: dr.mirfan@bzu.edu.pk

Muhammad Shaukat Malik 💿

Institute of Banking and Finance Bahauddin Zakariya University, Multan, Pakistan E-mail: shoukatmalik@bzu.edu.pk

*Corresponding author

Abstract: The chance to start your own business is appealing when the labor market experiences a slump in the current crisis scenario. The factors that affect sustainable entrepreneurship were examined in this study. The factors contributing to an entrepreneur's success, including successful intelligence, social skills, and entrepreneurial personality, were examined. In the causal relationship study, we used a questionnaire designed specifically for small and medium-sized business owners. We used multiple regression methods to analyze the data on a five-point Likert scale we collected. The findings demonstrate a strong positive relationship between entrepreneurial success, successful intelligence, and entrepreneurial personality. However, no connections between social skills and building a sustainable business have been made. The causes are rooted in culture. From the viewpoints of academics, practitioners, and policymakers, it has practical ramifications. Aspiring businesspeople can use the outcomes to guide their decisions. To better understand how personality factors affect the viability of recently created firms in emerging nations, this study is unique.

Keywords: Successful intelligence; Entrepreneurial personality; Social skills; Sustainable entrepreneurship; Crises time

Biographical notes: Dr. Muhammad Irfan is currently working as an Assistant Professor of Management at Bahauddin Zakariya University in Pakistan. He has a Ph.D. in management sciences from the University of Science and Technology Beijing, China. His major areas of research include entrepreneurship, quality management, and finance. He has several research publications in the leading impact factor international journals. He also authored a book "Corporate Governance Theory and Practice". He also served as guest Associate Editor in the Frontiers in Psychology Journal for a year. Nowadays he is focused more on entrepreneurship disciplines.

Dr Muhammad Shaukat Malik is working as Professor at the Institute of Banking & Finance, Bahauddin Zakariya University Multan, Pakistan. He has done a PhD in the subject of Business Administration from the Institute of Business Administration (IBA) Karachi, Pakistan. Presently he is the Professor and Director of the Institute of Banking & Finance at Bahauddin Zakariya University, Multan, Pakistan. His areas of research are Entrepreneurship, Human resource management, and Corporate Governance. He supervised many students of M.Phil. and PhD students. He published more than 100 research papers in different Journals.

1. Introduction

In developing countries, entrepreneurship development is a significant concern. Pakistan is among the developing countries with a literacy rate of 62.7% and suffers from a high unemployment rate of 6.42%. (Trading Economics, 2022; World Bank, 2022). The job market is tightening due to the lack of sustained corporate growth. The economic theory of entrepreneurship asserts that economics and entrepreneurship are intertwined and that a lack of entrepreneurship creates economic backwardness. Pakistani government policies, laws, and regulations appear to have seriously undermined this entrepreneurial spirit, with Pakistan ranked 108th on the Ease of Doing Business Index ("Ease of doing business rank 1 = most business-friendly regulations."; World Bank, 2020).

There needs to be more Pakistani government support for young people who want to start their businesses. Hence many young people in the country need to be more relaxed about doing so. It leads to an increase in unemployment and a decrease in the production of products and services. The primary focus of this research is on the factors contributing to developing ideas into viable business concepts. Ideas and inventions that lead to a successful business model implementation are the driving force behind every business model.

Nevertheless, developing ideas into viable business concepts is a complex undertaking. This research's primary objective was to analyze the most critical factors that play a role in determining the level of entrepreneurial success. The requirements and the hurdles in its implementation must be met for the company to be sustainable. According to Kubková et al. (2014), SMEs are not as sustainable as large enterprises because of the numerous challenges, such as a lack of financial resources and other market restrictions. All these barriers impede small and medium-sized businesses from growing into multinational corporations. Every business endeavor carries some degree of inherent danger. Overall, Pakistanis are risk averse. The formation of brand-new firms and the transmission of the most recent advances in scientific and technological fields are both extremely pitiful. People are not aware of the necessary processes to transform their ideas into viable businesses for the future. The government's attention is also diverted away from this matter.

A rising trend, particularly in less developed nations, is entrepreneurship to address economic difficulties. Due to economic downturns, pandemics, and other natural disasters, the labor market is contracting. A nation's GDP growth is directly influenced by entrepreneurial activity. It covers modest, creative enterprises growing into significant businesses. In this aspect, the situation in Pakistan has been very depressing. Due to bureaucracy and an absence of a supportive environment, the government is making feeble attempts to raise Pakistan's Ease of doing business index. Entrepreneurs' social skills, successful intelligence, and personality attributes are essential to developing an ongoing entrepreneurial endeavor, whether in the services or industrial industries. For the development of an ongoing entrepreneurial endeavor, entrepreneurs' social skills,

successful intelligence, and personality attributes are essential, whether in the services or manufacturing industries. In this regard, efforts to develop human capital and resources are desperately needed. Better start-up performance will result from understanding the fundamental business dynamics and identifying a generalized set of traits that will outperform the industry. The focus of this study is on identifying the traits of successful entrepreneurs. The study also offers guidelines that businesspeople can use to succeed.

1.1. Research question

We aim the study to find the answers to the following question.

• What is the link between personality traits like successful intelligence, entrepreneurial personality, and social skills of entrepreneurs with entrepreneurial success?

1.2. Study objectives

- To investigate the role of successful intelligence in converting an idea into a sustainable business
- To investigate the role of entrepreneurial personality in converting an idea into a sustainable business
- To investigate the role of social skills in converting an idea into a sustainable business

2. Literature review

Entrepreneurs take an innovative approach with a vision, an attitude of achievement, and the ability to take risks confidently (Djankov et al., 2006; Lee, Florida, & Acs, 2004). To be productive entrepreneurs, they need to have the proper infrastructure and the right environment. Going to work instead of entrepreneurship depends on the culture and resources prevailing in a particular country. Sagar et al. (2023) delve into the multifaceted relationship between entrepreneurship and economic growth. Their comprehensive overview incorporates evidence from both developed and developing nations. The authors establish that entrepreneurship serves as a pivotal catalyst for economic growth, playing a vital role in fostering development across diverse economic landscapes. Shane and Venkataraman (2000) considered it to be two-sided entrepreneurship. The first is to find opportunities, and the second is to take advantage of them in ways that help run new businesses. Those with formal education and training can benefit those uneducated and help them with these tasks. Batool and Ullah (2017) found that precedents such as creativity, family factors, motivation, financial access, and personality traits positively impact the success of female entrepreneurship efforts. Still, in developing societies, women strive to discourage entrepreneurs in their families. Chen et al. (2017) found that entrepreneurs, recognizing entrepreneurial opportunities and creativity, address career success, social reputation, work-life balance, and basic financial needs.

The innovation theory of Schumpeter (1949) and the economic theory of entrepreneurship are closely related to the study framework. According to Schumpeter's innovation theory, entrepreneurs create original concepts and products using cutting-edge technology before bringing them to market. Making an idea into a green, sustainable business takes time and effort. The start-up's goals go beyond pure financial gain, including improving society and building a private dynasty for the founder. According to the economic theory of entrepreneurship, the need for social change drives the generation of entrepreneurial ventures. Entrepreneurial endeavours and the economy are closely related. The growth of more environmentally responsible firms contributes to the economy's expansion. There have been fewer studies on the complete transformation of ideas into businesses using entrepreneurs' intelligence, their penalties, and their social skills. In the study, researchers investigated several different dimensions of variables. According to Schwartz and Teach (2000), more research needs to be conducted on discovering new ideas and the implementation of such ideas into viable businesses. There is a need for additional research into turning company ideas into viable and sustainable enterprises.

2.1. Conceptual framework

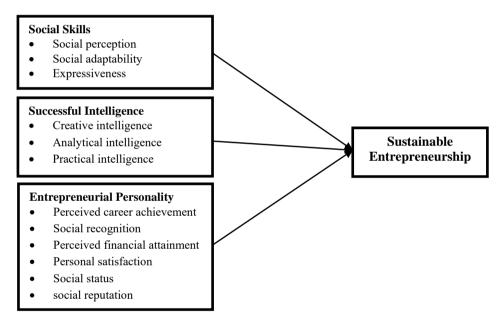


Fig. 1. Conceptual framework

The conceptual framework is presented in the above Fig. 1. We constructed three dimensions of social skills: social perception, social adaptability, and expressiveness. In this study, social cognition comprises the ability of entrepreneurs to judge people by recognizing the characteristics of others, and social adaptability comprises the ability of entrepreneurs to engage with others. Expressiveness shows the ability of the entrepreneur to express his feelings in front of others. We have built a successful intellect from creative, analytical, and practical intellect. We designed it with creative intelligence in mind. Creative intelligence comprises elements that show how entrepreneurs think and generate ideas, and analytical intelligence shows how entrepreneurs think and organize new ideas. We have built practical intelligence on how entrepreneurs apply their knowledge. (Sternberg et al., 1995; Bowden & Jung-Beeman, 2003). We constructed an entrepreneur's personality based on the extent to which the entrepreneur's personality is influenced when thinking of new ideas or embracing innovations. We have translated

entrepreneurial personality into the following aspects like recognized professional success, social recognition, economic success, personal satisfaction, and social status (Lau, Shaffer & Au, 2007; Bachmann & Simon, 2014). Achieving a recognized career enabled entrepreneurs to derive value from their careers, but social awareness encompasses several well-known entrepreneurs. Sustainable business success includes the financial success of personal satisfaction. It includes the entrepreneur's personality and career satisfaction, and social status. It also includes entrepreneurs occupying a specific societal position by having the company (Osgood et al., 1975).

2.2. Social skills are significantly associated with sustainable entrepreneurship

Baron and Markman (2000) argued that entrepreneurial social skills help entrepreneurs interact effectively with others and ultimately play an essential role in their success. Later on, Baron and Markman (2003) found that one aspect of social capability (e.g., accuracy in recognizing others) is positive for the financial success of entrepreneurs working in two different industries: cosmetics and high technology. Ghafar (2020) identified an essential connection between social skills and entrepreneurial intention among business students. It leads them to become successful entrepreneurs in the future. Klyver and Arenius (2020) analyzed the relationship between networking and social skills and entrepreneurial venture success in the first three years and found a positive connection between them. The results of studies primarily related to the measurement of new business performance show specific social skills (social cognition, expressiveness, Etc.) are significant predictors of entrepreneurial success (Baron & Tang, 2009; Hii, P. K., et al., 2022). Social and creative skills are also connected with the success rate of social entrepreneurship (Akar & Burcu Doğan, 2018; Tomczyk et al., 2022; Jeong & Kim, 2022). Leyden et al. (2014) suggested that the social aspects of entrepreneurship increase the likelihood of entrepreneurial success. As entrepreneurs gain more knowledge, their innovative activities are more likely to be sustainable.

2.3. Relationship between successful intelligence and sustainable entrepreneurship

Pre. Sternberg (2004) described successful intelligence as practical, creative, and analytical intelligence to determine entrepreneurial success. This study contrasts with the standard theoretical view of intelligence, but research needs more confidence to express it in quantitative terms. Stemler et al. (2006) found that cognitive personality abilities are related to entrepreneurial success outcomes and that group ethnicity matters in cognitive abilities. Karimi, Kloshani, and Bakhshizadeh (2012) concluded that emotional and cognitive intelligence has a significant impact on the success of entrepreneurs. The results of Ataei Zanjani Nezhad, Marjani, and Najafi (2015) revealed a positive relationship between entrepreneurship and emotional intelligence, including its five components: intrapersonal, interpersonal, mood, impulse control, and compatibility. Ngah and Salleh (2015) argued that positive emotional intelligence leads to an enhanced capacity for innovation, through which organizations can achieve entrepreneurial success. According to Bahadori (2012), an entrepreneur with greater emotional intelligence can solve their problems more effectively and thus succeed in their business by controlling their emotions. While Chin et al. (2012) suggested that emotional intelligence is vital in developing creativity and innovation in sustainable entrepreneurs. By studying the 29 Chinese provinces on the impact of entrepreneurship, Zhang and Zhang (2012) found that entrepreneurship positively impacts a country's economic growth. Humphrey (2013) described that extraordinary emotional intelligence entrepreneurs collaborate effectively

with customers, employees, and all stakeholders, and employees will place a high value on their leadership. Entrepreneurs will be durable in guiding, motivating, and helping deal with their employees' work stress if they are empathetic.

2.4. Relationship between entrepreneurial personality and sustainable entrepreneurship

Staniewski, Janowski, & Awruk (2016) found that some entrepreneurial personality traits, such as (emotional stability, stress tolerance, autonomy, passion, risk tolerance, Etc.) are the success of entrepreneurs in terms of business. It was suggested that there was a significant and positive correlation. Rauch & Frese (2007) argued that matching personality traits have a powerful impact on entrepreneurial success because they rely on explicit task-specific explanations. Gupta and Muita (2013) surveyed US-based SMEs where entrepreneurial personality is strong and proactive in SMEs' financial and nonfinancial performance, which is the source of access to entrepreneurial success. They found it to have an impact. the Big Five personality traits were associated with entrepreneurial success but became less important after including META rice field (Leutner et al., 2014; Menkhoff et al., 2022; Akbarialiabad et al., 2021; Thongmak, 2021; Kushniruk & Parush, 2020). Similarly, Antoncic et al. (2015) found that there are five critical factors in gender-related entrepreneurial personality (openness, integrity, and extroversion) that are predictors of entrepreneurial success., Coordination, and neuroticism). The four personality factors (openness, integrity, extroversion, and coordination) significantly differed between men and women.

Based on the extensive review of the literature, the following hypotheses were proposed for the study:

H1: Successful intelligence is significantly associated with sustainable entrepreneurship.

H2: Social skills are significantly associated with sustainable entrepreneurship.

H3: Entrepreneurial personality is significantly associated with sustainable entrepreneurship.

3. Method

3.1. Procedure and sample selection

It was a cross-sectional study. For primary research, the data collection technique is essential. By conducting the survey, we collected the data at one point. The population included all the entrepreneurial business owners in Punjab, Pakistan. The target respondents are chosen from the population based on convenience sampling for the generalizability of the study. Since Punjab is the most developed region of Pakistan, the sample drawn from the region represented the country's entrepreneurs at large. A convenient sampling technique was used to draw a sample from the population. We have sent 400 questionnaires to respondents in physical and electronic form via email or WhatsApp link. In return, we received 310 completed surveys, making a response rate of 77.5 percent. It took a lot of work to reach out to educated entrepreneurs, so we used the convenience sampling method. According to Cheng and Dörnyei (2007), convenient sampling is a type of sampling in which a part of the population must meet specific

practical criteria, i.e., Ease of access, geographical proximity, availability at specific times, or desire to take part.

3.2. Profile of participants

The participants included those entrepreneurs who have started businesses in recent years. We accessed their data from personal relationships and websites. We approached them at their convenient times. We have collected data from various small to large-scale business owners. Those entrepreneurs came from different industries, ranging from medicines, construction, and product manufacturing to services like hotels, hospitals, restaurants, Etc. The participants were spread based on their qualifications, gender, marital status, and financial background. The age of their businesses was also diversified. Their participation in the survey was completely voluntary.

3.3. Measures

A two-part, self-administered questionnaire collected quantitative data. The first section gathered information about the respondents, and the second section contained a 5-point Likert scale (the range from "1" to "5" fully agrees). The study used adapted scales. We made minor changes to the scales to make them a better fit to measure what they measured. The scale of sustainable entrepreneurship was adopted from Osgood et al. (1975, pp. 25-26) and the United Nations Development Programme (UNDP) measure of sustainable development goals (UNDP, 2015), while the scale of successful intelligence was adopted (Sternberg et al., 1995; Bowden & Jung-Beeman, 2003). The social skills scale was adapted from Robert and Gideon (2020). while we adopted entrepreneurial personality from different studies (Mitchell et al., 2002; Lau, Shaffer & Au, 2007; Diener et al., 1985; Bachmann & Simon, 2014). Cronbach's alpha coefficient verified the reliability of the instrument. According to Tavakol and Dennick (2011), Cronbach's Alpha assesses the device's reliability. A reliability of 0.7 or more is good. The reliability of the questionnaire has been checked through the Cronbach alpha value of the instrument. All the values of the measure have been above the 0.7 threshold, authenticating that the measure utilized to collect data was reliable.

Multiple regression analysis techniques have been applied. In multiple regression, each variable is independently regressed on the dependent variable. One can analyze the entire model using only one dependent variable. It is important to quantify the effect of various amplified independent variables on a single dependent variable (Sykes, 1993; Monkman et al., 2020). We also performed a collinearity diagnosis to see the relationships between the independent variables and to evaluate whether the independent variables need to be mutually exclusive and internally complete. We used SPSS 22.0 statistical tool in this study. The results are proved by performing descriptive statistics, reliability, and regression analysis.

Table 1 shows that all the variable Cronbach values came to 0.75 for social skills, 0.84 for successful intelligence, 0.90 for entrepreneurial personality, and 0.92 for sustainable entrepreneurship. It shows that the measure used consisted of measuring the concepts validating the reliability of the questionnaire. The questionnaire measures the right concepts that it was meant to measure.

Table 1

Reliability of the questionnaire

Variables	No. of Items	Reliability (α)	Comments	
Social Skills	7	0.75	Reliable	
Successful Intelligence	8	0.84	Reliable	
Entrepreneurial Personality	11	0.90	Reliable	
Sustainable Entrepreneurship	10	0.92	Reliable	

4. Results and discussion

Table 2 and Table 3 show the results of a regression analysis of sustainable entrepreneurship. The model yielded an adjusted R^2 value of 0.410. Successful intelligence, people skills, and entrepreneurial personality have caused a 41% variability in the success of new ventures. A Durbin-Watson value of 1.995 shows no serious serial autocorrelation problems. This table shows the higher F = 24.294 values and sig. A value of 0.000 proves the suitability of the model.

Table 2

Model summary

Model	R	R^2	Adjusted R^2	Std. Error	Durbin-Watson
1	.640ª	.410	.393	.60323	1.995

Note. a. Dependent variable: Sustainable entrepreneurship

Table 3

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	26.521	3	8.840	24.294	.000 ^b
1	Residual	38.208	105	.364		
	Total	64.729	108			

Note. b. Predictors: Entrepreneurial personality, social skills, successful intelligence

Table 4 shows the positive impact of successful intelligence and entrepreneurial personality on sustainable entrepreneurship by generating significant scores of 0.002 and 0.000, respectively. Both variables contribute significantly to the success of a new company. The reason for this relationship is that intelligence is needed for every venture. Knowledge of analytical skills is needed. Every business needs a lot of information to process both from inside the organization and through environmental scanning. The IQ level of the entrepreneur can get and analyze that information to develop better products, better strategies, and set better goals. Since the business environment is very dynamic entrepreneurial successful intelligence is crucial, as also proved by the study. Another dimension of successful intelligence is creativity which leads to innovation in the way of doing business, supported by the innovation theory of Schumpeter (1949). the results validate the theoretical implications. Entrepreneurial creativity is essential to venture success.

Table 4Coefficients

Model		Unstandardized Standardized Coefficients Coefficients		t	Sig.	Collinearity Statistics		
		В	Std. Error	Beta		C	Tolerance	VIF
	(Constant)	678	.519		-1.307	.194		
1	Successful intelligence	.533	.169	.338	3.154	.002	.490	2.040
	Social skills	.058	.130	.046	.447	.656	.532	1.880
	Ent. personality	.615	.157	.356	3.908	.000	.679	1.473

Note. Dependent variable: Sustainable entrepreneurship

On the other hand, entrepreneurial personality, including perceived career achievement, social recognition, financial attainment, and personal satisfaction, is also a significant indicator of entrepreneurial success. The reason is multiple. Firstly, it motivates entrepreneurs from instinct factors to achieve and to contribute something towards himself/herself and to society. Social recognition will earn them respect, and to achieve that respect in society; the entrepreneur works hard to make achievements in the business venture. Since Pakistani society has become materialistic, there has been a shift from spirituality to materialism in recent years. People have become more encouraging and respectful to people with better material progress, and business success wins them that respect in society. The hypothesis of social skills and entrepreneurial success produced a significant value of above 0.05 and thus was rejected. The study contradicts the findings of previous research on social skills' contribution to business success (Ghafar, 2020; Klyver & Arenius, 2020). The table also shows no evidence of multicollinearity, as the VIF score is less than the threshold value of 10. Table 5 below provides the summary output of all the hypotheses in the study.

Table 5

Hypothesis summary

Hypothesis statement			
H1: Successful intelligence is significantly associated with sustainable entrepreneurship.	Accepted		
H2: Social skills are significantly associated with sustainable entrepreneurship.			
H3: Entrepreneurial personality is significantly associated with sustainable entrepreneurship.	Accepted		

5. Conclusion

The study concluded that to transform an idea into a sustainable business, entrepreneurs need to gain skills, such as intelligence and transform into an entrepreneurial personality. The study concludes that the personality traits of an entrepreneur, such as perceived career achievement, social recognition, financial attainment, personal satisfaction, social status, and social reputation, are positively associated with start-up success. The findings must be consistent with previous studies (Rauch & Frese, 2007; Gupta & Muita, 2013; Leutner, Ahmetoglu, & Chamorro, 2014). We have yet to prove that social skills are essential to start-up success. This finding is contrary to the literature. Social skills dimensions (social perception, adaptability, and expressiveness) are not significant indicators of sustained business. This finding may vary depending on the cultural context. Human capital is scarce in most developing countries, so entrepreneurial social circles are

less good at transferring technology as part of a sustainable economy. Successful intelligence has been a positive indicator of entrepreneurial success. This finding contradicts the findings of Sternberg (2004) while in support of previous studies (Stemler et al., 2006; Karimi, Kloshani, & Bakhshizadeh, 2012; Ataei Zanjani Nezhad, Marjani, & Najafi, 2015). The study offers a vast contribution to the knowledge of entrepreneurial success and failure paradigms.

5.1. Theoretical implication in line with the study findings

For academicians, it bears knowledge to equip the students about their future successful ventures. The students who want to pursue entrepreneurial ventures should be judged on the criteria and conduct their assessment tests. The theory of innovation and the economic theory of entrepreneurs also support the findings. The course should incorporate more content on the students' philosophical perspective and creative, analytical skills. Moreover, the student must be more aware of the importance of career, financial attainments, and social recognition. The focus on the socialization ability of the students' needs to be lessened as per the study's findings.

5.2. Practical implication in line with the study findings

It has practical implications for policymakers. Government can devise policies for startup grants to be disbursed to the intellect and entrepreneur-oriented people who have a firm commitment to their careers, social recognition, and profit-seeking. The theory of innovation and the economic theory of entrepreneurs also support the findings. Entrepreneurs can use these insights to make their businesses sustainable. They need to sharpen their intellectual skills, including practical, creative, and analytical intelligence, to confirm their business venture success.

Moreover, their personality needs to be more career, social recognition, financial attainment, and personal satisfaction oriented. Their quest in these areas will secure the success of their business venture. The stress on social skills needs to be lessened, and the companies should divert more focus of the entrepreneurs to their business activities like better planning, product development, product and service quality, and better supply chain management rather than socialization in Pakistan.

5.3. Limitations and future research

The study analysed the limited perspective of skills and traits of entrepreneurs taking new venture risks in a developing country. Future studies might incorporate more traits to evaluate the relationship with entrepreneurial success in the developed world. Moreover, a longitudinal analysis of the examined variables is recommended.

Author Statement

The authors declare that there is no conflict of interest.

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ORCID

Muhammad Irfan ^(b) <u>https://orcid.org/0000-0003-2578-6292</u> Muhammad Shaukat Malik ^(b) <u>https://orcid.org/0000-0002-2107-7627</u>

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