

# Openness to Experience and Entrepreneurial Intentions: A Mediating Role of Creative Problem-Solving among Students in Ludhiana

Kajal Juneja

Assistant Professor, Business Management, Punjab College of Technical Education, India

Corresponding Author: [kajaljuneja421@gmail.com](mailto:kajaljuneja421@gmail.com)

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## ABSTRACT

*This study investigates the relationship between openness to experience and entrepreneurial intentions among students, exploring the mediating role of creative problem-solving. Building on the Big Five personality framework and creativity research, we assume that individuals high in openness will exhibit stronger entrepreneurial intentions due to their enhanced creative problem-solving abilities. The study employs a quantitative research design with survey data collected from a sample of university students. The analysis utilizes structural equation modelling to examine the proposed relationships. We anticipate findings that support the mediating role of creative problem-solving, shedding light on the underlying mechanism through which openness to experience influences entrepreneurial aspirations. Our research contributes to the understanding of personality traits and individual differences in entrepreneurial intention, informing potential interventions and support programs to foster entrepreneurial spirit and equip students with the necessary skills for venturesome endeavours.*

**Keywords:** entrepreneurship, openness, experience, creativity, optimism, determination, entrepreneur

## I. INTRODUCTION

In the dynamic world of human endeavour, few threads shine as brightly as entrepreneurship. It's the fire in the eyes of an inventor tinkering with a revolutionary gadget, the audacity of a young chef crafting culinary magic in a cramped kitchen, the resilience of a lone coder weaving pixels into a game-changing app. It's the spirit of daring to dream, to defy the expected, to build something from the ground up. At its core, entrepreneurship is about spotting opportunities where others see obstacles. It's about taking calculated risks, fuelled by a relentless drive and a passion that burns brighter than fear. It's about harnessing creativity, channelling it into solutions that fill gaps, solve problems, and enrich lives. And it's not just about personal gain; it's about the ripple effect, the potential to create jobs, spark innovation, and shape the world around us. But the path of the entrepreneur is paved with both gold and grit. It demands determination, the ability to learn from failures and bounce back stronger. It requires adaptability, the agility to navigate uncertain landscapes and evolve with the ever-changing tides of the market.

Entrepreneurship is a marathon which requires certain traits reflecting true features of being an entrepreneur. This study is centred on to explore some of those traits required for an entrepreneur to live the life of dreams practically. These traits act as the spark and fuel for the entrepreneurial engine, influencing everything from decision-making to risk-taking and resilience. Openness to experience equips them with the curiosity and willingness to embrace the unknown. They readily explore new ideas, adapt to changing landscapes, and learn from diverse perspectives. This trait allows them to identify unique opportunities and develop innovative solutions that others might miss. Conscientious entrepreneurs are driven by a strong work ethic and a focus on achieving goals. They excel at managing time, resources, and risks, ensuring that their ventures operate efficiently and effectively.

Extraversion empowers individuals to build strong networks, connect with potential customers and partners, and effectively communicate their vision. They are natural leaders who can inspire and motivate others to join their entrepreneurial journey. Risk-tolerant individuals are comfortable venturing into the unknown, accepting the possibility of failure while understanding the potential rewards. They make decisions with a balanced perspective, weighing the odds without being paralyzed by fear. Resilient individuals possess the mental fortitude to bounce back from adversity, learn from their mistakes, and keep moving forward. They see challenges as opportunities for growth and use them to refine their strategies and build stronger ventures. While these are just some of the key personality traits for entrepreneurs, remember that the most important factor is your own unique blend of strengths and passions.

This research delves into the fascinating interplay between openness to experience, creative problem-solving, and entrepreneurial intentions among individuals in Ludhiana. We move beyond simplistic correlations to explore the intriguing possibility of creative problem-solving as a mediator in this journey. Our focus on these interlinked elements stems from their vital roles in the life of an entrepreneur. Openness ignites the spark of curiosity, driving individuals to experiment and tackle challenges. Creative problem-solving, the ability to navigate ambiguity and craft innovative solutions, becomes the compass guiding them through the inevitable complexities of building a business. By understanding the intricate interplay between personality, creativity, and intention, we can potentially equip aspiring entrepreneurs with the tools and support they need to transform their dreams into thriving businesses.

## II. LITERATURE REVIEW

**Li et al (2022)** The purpose of this study is to investigate how personality factors' influence on entrepreneurial intention is mediated by creativity. A thorough analysis of the connection between personality traits, creativity, and entrepreneurial intention has been done. After conducting several investigations, the following findings are discovered. First, extraversion, conscientiousness, and openness have a large favourable influence on entrepreneurial intention, while neuroticism has a considerable negative impact. Second, whereas conscientiousness, openness, and extraversion have a strong beneficial impact on creativity, neuroticism has a significant detrimental impact. Lastly, creativity plays a major beneficial function in influencing entrepreneurial intention.

**Cui et al. (2021)** The study employs a mediating model to draw attention to the innovative influence of entrepreneurship education (EE) on entrepreneurial mindset (EM) and to the paucity of research on this topic. Based on 1428 genuine samples from Chinese university students, the findings showed that EE had a complex effect on EM. Students' entrepreneurial spirit was greatly increased by EE, and this in turn encouraged the development of their EM. Significantly, entrepreneurial inspiration also acted as a mediator between EE and EM. The importance of educational characteristics was also emphasized.

**Lacap (2021)** goal was to determine how the students' entrepreneurial inclinations were influenced by their personality types in business administration. The project specifically looks at three areas: (1) a noteworthy relationship between the respondents' personality traits and sex; (2) a noteworthy relationship between the respondents' personality traits and their entrepreneurial intentions; and (3) a noteworthy difference between the respondents' sex and their entrepreneurial intentions. - The study found that while the respondents were ambivalent about extraversion and neuroticism, they tended to be conscientious, amiable, and receptive to new experiences.

**Ndofirepi (2020)** The predictive association between the perceived benefits of entrepreneurship education and entrepreneurial ambitions was mediated by several studied psychological factors, including the internal locus of control, risk-taking inclination, and achievement need. For this, a cross-sectional survey with a sample of 308 Zimbabwean students enrolled in vocational education was employed. The findings indicate a positive and statistically significant correlation between the effects of the entrepreneurship education variable and the need for achievement, risk-taking inclination, internal locus of control, and entrepreneurial goal intents.

**Karimi (2020)** created a model and tested it to find out how much each element contributed to entrepreneurial ambitions. The cognitive factors included subjective norms, attitudes toward perceived behavioural control, and entrepreneurship. The emotional factors included entrepreneurial passion. This is a quantitative study that gathers data via a self-report questionnaire. Using a sample of 250 university students, the partial least squares method was used to evaluate the hypotheses. The findings show that, through their cognitive antecedents, entrepreneurial enthusiasm and intentions have a substantial indirect link.

**Vamvaka et al. (2020)** Determine whether there are gender-related variations in the degrees of and relationships between perceived behavioural control, entrepreneurial intention, and attitude toward entrepreneurship. Four hundred and forty-one Greek undergraduate information technology students made up the study's sample. The findings indicated that perceived behavioural control is made up of two components: perceived controllability and perceived self-efficacy; attitude is made up of one instrumental component and one affective component; and entrepreneurial intention is best represented by three factors: choice intention, commitment to entrepreneurship, and nascent entrepreneurship.

**Bazkiaei et al. (2020)** A study explored how big-five personality traits, entrepreneurial education, and attitudes toward entrepreneurship influence the desire to start a business. They surveyed 165 individuals using questionnaires and analysed the data using advanced statistical techniques. Interestingly, the study found that attitudes toward entrepreneurship acted as a bridge, connecting personality and education to the intention to become an entrepreneur. This suggests universities can significantly encourage entrepreneurship by fostering entrepreneurial thinking and offering practical training seminars.

**Voda and Florea (2019)** investigated, using a cognitive approach, the relationships between youth's locus of control, need for achievement, and entrepreneurial intention, as well as the extent to which entrepreneurial education fosters entrepreneurial skills and informs the youth that entrepreneurship is a viable career path. To examine entrepreneurial intentions, locus of control, achievement need, and entrepreneurial education within the framework of Romania, this study employed a quantitative design based on survey responses from 270 students. The findings show that, both alone and in conjunction with control variables, locus of control, the need for achievement, and entrepreneurial education all proved to be significant predictors of venture creation among young pupils.

**De Moraes et al. (2018)** examined the impact of features of the university environment and entrepreneurship on undergraduate students' intentions to start their own business. created a model that considers risk-taking, the university environment, and self-efficacy as direct determinants of entrepreneurial intention and entrepreneurial traits as determinants of self-efficacy. The findings show that attitudes toward taking risks and self-efficacy, as well as the university environment, have an impact on students' intentions to become entrepreneurs.

**Luc (2018)** This research explored the intricate link between perceived financial access and the intention to become a social entrepreneur. Using a model based on planned behaviour, they analysed how individuals' perception of their ability to secure funding indirectly influences their entrepreneurial drive through their attitude and perceived feasibility of acting. The study highlights the importance of fostering a positive perception of financial accessibility as a key factor in promoting social entrepreneurship. This research emphasizes the need to shift mindsets around financial accessibility to nurture a thriving ecosystem of social entrepreneurship.

**Israr (2018)** This study investigated the factors that shape college students' entrepreneurial dreams. Female students were less likely to express an interest in entrepreneurship, and students over the age of 20 were less likely to want to start a business. Students with high levels of openness, agreeableness, and extraversion were more likely to express an interest in entrepreneurship. Finally, education was found to be the most important factor. Students who had received entrepreneurship education were significantly more likely to express an interest in starting a business. Overall, the study found that while personality play a role, it is exposure to entrepreneurship education and positive role models that truly ignite the entrepreneurial spark in college students.

**Mahendra et al. (2017)** examines how entrepreneurship education affects college students' intentions to start their own business when they enrol in the State University of Malang's Department of Management, Faculty of Economics. The results of the study demonstrated that entrepreneurship education had an indirect impact on entrepreneurial intention, with two significant mediating variables being students' entrepreneurial motivation and attitude.

**Wang et al. (2016)** In the rural parts of Asia-Pacific, encouraging farming work is essential for sustainable economic development. In agricultural education, how to encourage rural entrepreneurship has recently gained importance. The general self-efficacy scale, the entrepreneurial intention scale, and the five-factor model of personality all had their factor structures validated in the first study. The findings suggest that there are two components to entrepreneurial intention: readiness and conviction. As a result, there is some evidence for the self-efficacy mediation hypothesis. While neuroticism does not reliably predict either conviction or preparation, extraversion, openness, conscientiousness, and agreeableness do.

**Liang et al. (2015)** verified the 18 entrepreneurial intention factor structures and personality trait factor structures using a sample of 274 information and communication technology (ICT) students. The outcomes showed that preparation and conviction are the two components of entrepreneurial intention. Both measures were positively influenced by the qualities of conscientiousness and openness, while extraversion and neuroticism had no discernible effect. The only trait that adversely affected entrepreneurial readiness was agreeableness.

**Ramos (2014)** centred on the desire for entrepreneurship among Batangas State University business students considering their aptitude for entrepreneurship. The study was conducted using the descriptive method of research. According to the study, most respondents are middle-class, do not have a family company, and are majoring in management. It was also discovered that the profile characteristics had no effect on the ambition to become an entrepreneur. It merely demonstrates how the students' entrepreneurial intention is unaffected by the variables in their profiles.

### III. RESEARCH METHODOLOGY

#### 3.1 Research Objective

1. To evaluate the mediating role of creative problem-solving in the relationship between openness to experience and entrepreneurial intentions.
2. To identify specific aspects of both openness to experience and creative problem-solving that are most relevant to entrepreneurial intentions.
3. To study those conditions that may affect the relationships between the problem solving and openness to entrepreneurial intentions.

### 3.2 Sampling Unit and Accessible Universe

To fulfil the Purpose of Study, the sample for the study comprises of students of Ludhiana. The Target population was a composition of individuals from various colleges.

### 3.3 Data Collection

The collection of the data was primary in nature with the help of a well-structured Questionnaire from 225 respondents involving statements on various traits required to be an entrepreneur along with the intention to become the same. The method sampling used was Non-Probability Sampling (Convenience sampling).

### 3.4 Data Analysis

To understand the gathered data in easiest way, Tabular Presentation of Data along with Percentage, Pie Chart and Bar-Graph has been used in order to get the meaningful interpretations.

## IV. DATA ANALYSIS AND INTERPRETATION

### 4.1 Demographic Analysis

The following table illustrates the demographic profile of 225 respondents across the city of Ludhiana. The detailed bifurcation is stated in Table 1.

Category	Classification	Frequency	Percentage (%)
<b>Age</b>			
	Below 18	0	0
	18-23	204	90.7
	23-27	20	8.9
	Above 27	1	0.4
	<b>Total</b>	225	100
<b>Gender</b>			
	Male	120	53.3
	Female	105	46.7
	<b>Total</b>	225	100
<b>Qualification</b>			
	Matriculation	9	4
	Senior Secondary	13	5.8
	Undergraduate	140	62.2
	Graduate	47	20.9
	Postgraduate	16	7.1
	<b>Total</b>	225	100

**Table 1:** Demographic Profile of Respondents  
**Source:** Author's Calculation Based on Primary Data

#### 4.2 Comprehensive Data Analysis

##### A: Willingness to Become an Entrepreneur

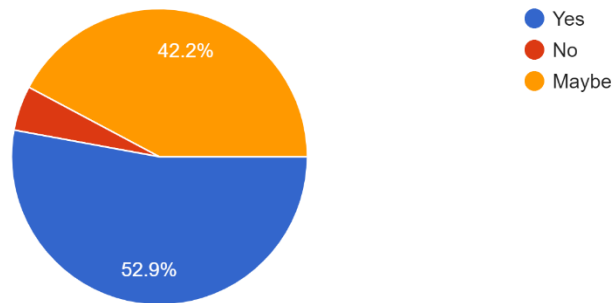


Figure 1: Willingness to become Entrepreneur

After gathering data, it was found that more than half of the population is willing to become an entrepreneur while 40% of the population is still confused whether they want to or not.

##### B: How Frequently They Come Up With An Idea?

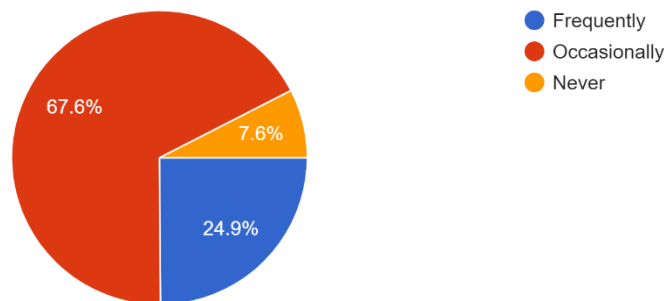


Figure 2: How Frequently idea is generated

Above pie chart shows us that 67.6% of the population comes up with an idea occasionally whereas 24.9% is efficient enough to generate an idea frequently.

##### C: Motivation Factors for an Entrepreneur

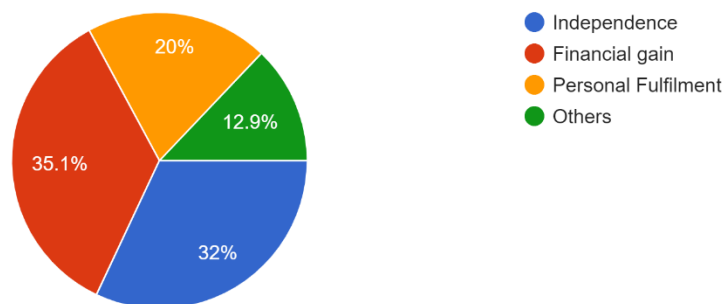
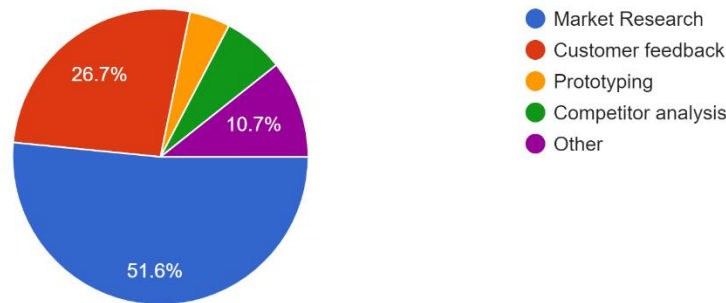


Figure 3: Motivation Factors for an Entrepreneur

Among many factors of motivation in the world, 35.1 % of the population believe that finance is the best motivation to be an entrepreneur. On the other hand, Independence is considered as second-best motivation. At third place, its Personal fulfilment while there are various other factors which motivate Entrepreneur personally.

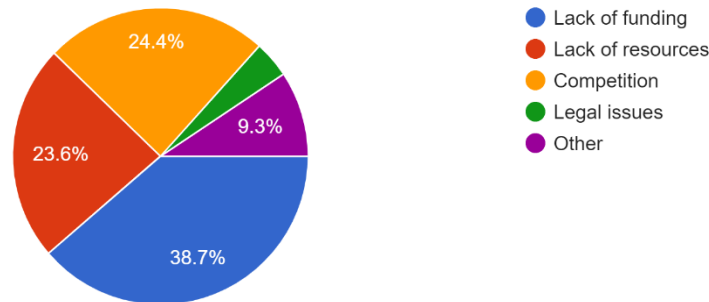
**D: Validation of Entrepreneurial Ideas**



**Figure 4:** Validation of Entrepreneurial Ideas

The idea comes into practice only on some basis. More than 50% believe that Market research will be very helpful for Validation of ideas. Customer Feedback is at second place claimed by 26.7% individuals rest of the individuals believe in Prototyping and competitors' analysis.

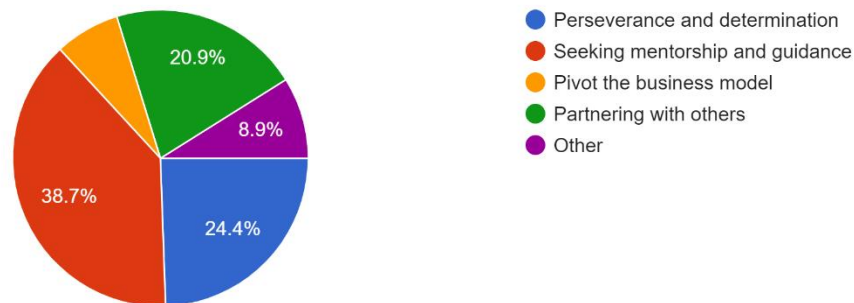
**E: Challenges for an Entrepreneur**



**Figure 5:** Challenges for an entrepreneur

Lack of funding is considered as biggest challenge by 38.7% of individuals, 23.6% believe in lack of resources, 24.4% believe in competition to be a challenge for an entrepreneur. Rest of respondents believe legal issue challenge while there can be other reasons for the same.

**F: Strategies to Overcome Challenges**



**Figure 6:** Strategies to overcome Challenges

There are many strategies to overcome the challenges but seeking Mentorship ad Guidance is the best. After this, Perseverance and determination is the second-best strategy followed by partnering with others, Pivot the Business model and others.

**G: Statements about Opinions of Entrepreneurial Intentions among Individuals**

Opinionated Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
I am comfortable with uncertainty and ambiguity.	40	83	88	12	2	225
I am open to new experiences.	119	88	16	1	1	225
I am proactive and take initiative.	98	74	44	8	1	225
I am confident in my abilities.	102	86	33	3	1	225
I can see problems from different angles and find creative solutions.	57	100	63	4	1	225
I am comfortable thinking outside the box and challenging conventional wisdom	56	93	69	6	1	225
I am persistent in trying different approaches to solve problems	55	108	54	7	1	225
I am skilled at adapting to new situations and finding unconventional solutions	67	97	56	5	0	225
I enjoy trying new and exciting things, even if they are risky	99	88	34	4	0	225
I am open to different ideas and perspectives, even if they are different from my own.	82	97	38	7	1	225
Entrepreneurship is considered as a preferred career option in the globalised world today.	115	89	20	1	0	225

**Table 2:** Statements about Opinions of entrepreneurial Intentions among Individuals

From the above table, we can see that Comfortableness among individuals is almost neutral (88) while 83 respondents believe that they are comfortable to deal with uncertainty to become an entrepreneur. Exploring new things always invite new opportunities as well. Majority of the respondents strongly agree and agree that entrepreneurial intentions will increase if one is exploring and is also proactive and confident enough. Out of 225 individuals, 100 of them agree that their perception is different from others. They can see problems from different angles and can find creative solutions to it which creates intention to become an entrepreneur. 93 of the respondents agree that they Brainstorm the ideas and think outside the box while 69 is neutral of this opinion. 108 out of 225 respondents believe that they are persistent to solve one problem with various approaches which is evident to find the best solution to become an entrepreneur.

Finding unconventional solution is a difficult task but 97 agree that they can adjust in new environment and find solutions of it which adds on one competency to become an entrepreneur creating a positive intention to it. Risk is the most important challenge in the life of an entrepreneur. This can help them to succeed or to learn. Trying new and exciting things even if they are risky help entrepreneur earn a lot. 99 of the respondents strongly agree to this statement. Different ideas from any person should be appreciated being an entrepreneur. 97 of Individuals strongly agree and 82 agree that ideas should be welcomed. At last, 115 individuals strongly agree and 89 agree that entrepreneurship is considered as a preferred career option in globalised world.

## V. FINDINGS AND DISCUSSIONS

Based on gathered data through Primary sources, we found out that majority of the individuals want to become an entrepreneur. But one should be determined to become entrepreneur intentions and required personality traits like Openness, creativity, Experience, extrovert, Neuroticism, Exploring new things in life and many more. There are so many basis in which individuals are sure that they can do this. They can see the tapped market in an untapped way and find an opportunity to do business in that market as well. The need is just required to find opportunity, find creative solutions, and convert it into a business model. On the other hand, there are also individuals who are still confused whether they want to become an entrepreneur or not. Legal Issues not creating a bigger challenge for individuals, but Finance is.

## VI. LIMITATIONS OF THE STUDY/ GAPS FROM THE EXISTING STUDY

Following gaps were found from the study conducted. These are listed below:

- A decreased sample size has resulted in insignificant results for several of the parameters. For a more thorough investigation, a larger sample may be collected.
- For the sake of this study, only one district was chosen, however other districts may have been chosen to get better findings.

## VII. CONCLUSION

Individual who has a very different perception, who can see the opportunity in already tapped market can become an entrepreneur. There are so many individuals who are willing to and have ideas to occasionally. Majority of the individuals has entrepreneurial intentions and claiming they have entrepreneurial personality traits as well. Entrepreneurship is now being considered as a Preferred Career option in a Globalised World today.

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