

YOUNG FEMALE ENTREPRENEURIAL ORIENTATION IN A CONTEXT OF CRISIS. THE CASE OF A DEVELOPING COUNTRY

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Abstract: *Entrepreneurship serves as a catalyst for economic development, particularly during crises, as it fosters economic resilience through the establishment of new enterprises and the creation of employment opportunities. Women possess a significant entrepreneurial potential, and nurturing this potential could empower women to contribute substantially to sustainable economic growth. This paper investigates the relationship between the entrepreneurial orientation (EO) of female students in Cluj-Napoca and their entrepreneurial intention (EI). Given the current context of crisis (marked by a post-pandemic situation, Ukraine war, energy crisis and high inflation) we have also studied its impact on the entrepreneurial orientation. To achieve these research objectives, we have employed a questionnaire-based survey among 231 female students from Cluj-Napoca enrolled in all three levels of study (bachelor, master, and PhD). The results show that the entrepreneurial orientation of students (as a unidimensional construct) has a significant influence on their entrepreneurial intentions. Among the five investigated EO dimensions (risk-taking, innovativeness, proactiveness, passion and perseverance), it was found that only passion influences significantly the EI. It was also found that the current crisis is a factor influencing the entrepreneurial orientation of female students. Our study contributes to the body of literature in gender studies and entrepreneurship studies by testing two newly proposed EO dimensions: passion and perseverance. The practical implications of our research consist in recommendations for educational institutions and policymakers for designing more effective entrepreneurship education programs and support policies for women pursuing an entrepreneurial career.*

Keywords: entrepreneurial orientation, entrepreneurial intention, female students, crisis

JEL classification: L26.

1. Introduction

Entrepreneurship and innovation have long been recognized as critical drivers of wealth and sustained economic development (Romer, 1994; Prabha Devi et al., 2019; Hernández-Sánchez et al., 2020; Lee & Rodríguez-Pose, 2021). During periods of crisis, the creation of new businesses plays a pivotal role in generating jobs and supporting the local economy (Dana, 2004). Consequently, investigating the factors influencing the choice of an

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entrepreneurial career remains a pertinent research topic (Pruett, 2009; Uansa-ard and Wannamakok, 2022).

The 2021/22 GEM Women's Entrepreneurship Report emphasizes a global gender disparity in startup engagement, revealing that women are less involved in entrepreneurial activities compared to men. Globally, statistics indicate that two out of every five early-stage entrepreneurs, one in three high-growth entrepreneurs, and one in three innovation entrepreneurs focused on national and international markets are women (GEM, 2022). As such, it can be argued that women possess an important entrepreneurial potential and if this potential is discovered and nurtured women could contribute to sustainable economic growth.

Building on the global perspective presented by the GEM report, it is essential to examine the local landscape to gain a comprehensive understanding of the challenges and opportunities women face in entrepreneurship. According to the National Institute of Statistics (NIS), the yearly survey on new businesses and the profile of Romanian entrepreneurs reveals a significant gender disparity. More than half of the companies in Romania are established by men, and there has been a minor decrease in the share of female founders from 38.5% in 2020 to 38.4% in 2021 (NIS, 2023).

Cluj-Napoca, one of Romania's largest university centres that attracts students from all Romanian regions, provides a unique context for exploring female entrepreneurship. According to NIS data, there were 71,720 students in Cluj-Napoca in 2021, with a notable majority being female (56.92%).

Previous research focusing on gender differences in entrepreneurship have yield mixed results. While some did not found differences between men and women, others argued that women entrepreneurs differ from men with respect to characteristics, motivation, entrepreneurial skills (Chhabra, Raghunathan and Rao, 2020). To gain deeper insights, it is imperative to conduct research that delves into the attitudes of female students toward entrepreneurship and explores the factors that significantly influence their entrepreneurial inclinations. Understanding these dynamics could pave the way for targeted initiatives to empower and encourage more women to pursue entrepreneurial ventures, thereby fostering a more inclusive and diverse business landscape.

Specifically, this research explores the relation between entrepreneurial orientation and the entrepreneurial intention of female students from Cluj-Napoca. Furthermore, it aims to explore the influence of each dimension of entrepreneurial orientation on entrepreneurial intention by including in the study besides the core dimensions of EO (innovativeness, risk-taking and proactiveness), two relatively new dimensions that were not previously studied in the Romanian context: passion and perseverance. To ensure the study reflects the current post-pandemic situation, the War in Ukraine, the energy crisis, and high levels of inflation, the research also investigates the impact of this crisis context on entrepreneurial orientation. By addressing these multifaceted aspects, the study aims to contribute valuable insights for fostering female entrepreneurship in the face of contemporary challenges.

2. Literature Review and Hypotheses development

Orientation, as a notion seen from an entrepreneurial perspective, has received many labels over time, such as entrepreneurial orientation, intensity, posture, or even corporate orientation (Zahra, 1999). Clearly, entrepreneurial orientation captures, in fact, the decision that an individual can take in the possible future, without being forced to do it in the present (Arrighetti et al., 2013).

Over the years, the topic of entrepreneurial orientation has been increasingly approached by researchers, being seen in most cases from a company's perspective, determining its performance. However, more recent studies have shown that entrepreneurial orientation can also be seen from the perspective of an individual (Robinson and Stubberud, 2014). On an

individual level, entrepreneurial orientation denotes the personal attributes or predispositions that may heighten the inclination to participate in entrepreneurial endeavours (Bolton and Lane, 2012). Although we are talking about a new way to look at this phenomenon, some studies support that individual entrepreneurial orientation is a multidimensional construct that includes similar elements to firm-level entrepreneurial orientation. Therefore, some studies demonstrate that individual entrepreneurial orientation and a company's success are positively correlated (Bolton and Lane, 2012; Chien, 2014).

In order to determine entrepreneurial orientation, specific dimensions of it were developed. Initially, Miller (1983) proposed three dimensions: risk-taking, innovativeness and proactiveness. Lumpkin and Dess (1996) have proposed a five dimensions construct including, besides the initial dimensions, autonomy and competitive aggressiveness. The literature has demonstrated that these characteristics and abilities of entrepreneurs represent the foundation of entrepreneurial orientation.

When we refer to the dimensions of entrepreneurial orientation two dominant perspectives can be identified in previous research. The first perspective, the unidimensional one, emphasizes that innovativeness, risk-taking and proactivity must be considered simultaneously when measuring entrepreneurial orientation thus it is a construct that needs to be examined as a whole (Gupta and Gupta, 2015). The other perspective, the multidimensional one, suggests that if any of the entrepreneurial dimensions (risk-taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy) are present, the label of entrepreneur can be used (Hughes and Morgan, 2007).

Entrepreneurial based research managed to develop models that can link the intention to implement specific actions in the present with the benefits they could bring in the future. These models are considered compelling because they have excellent predictive power. The most used point of reference is the concept of entrepreneurial intention. This term can be defined as the certainty that a person intends to open a business at a certain point (Thompson, 2009).

The individual entrepreneurial orientation as one of the predictors of entrepreneurial intention has been the focus of previous research (Ekpe and Mat, 2012; Ibrahim and Lucky, 2014; Koe, 2016; Twum et al., 2021). A study carried out on students from Nigeria in 2014 demonstrated the fact that there is a reasonably close relationship between entrepreneurial orientation and entrepreneurial intention (Ibrahim and Lucky, 2014). Another study conducted in Nigeria, but among female students only, confirms the relationship between entrepreneurial orientation and entrepreneurial intention (Ekpe and Mat, 2012). Moreover, it was demonstrated that students from the universities of Vienna and Munich have lower entrepreneurial intention than those from the USA, even though the latter study in the technical field (Franke and Lüthje, 2004). These findings led to the formulation of the first hypothesis:

H1: The entrepreneurial orientation of female students in Cluj-Napoca positively influences their entrepreneurial intention.

Innovativeness refers to perceiving and acting on entrepreneurial activities in new and unique ways (Robinson et.al, 1991; Koh, 1996). According to a definition offered by Lumpkin and Dess (1996, pp.142) innovativeness represents "the tendency to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes". At the individual level, Koh (1996) considers that entrepreneurs are more innovative than people who do not own a business.

A study conducted by Law and Breznik (2017) showed that engineering students have a higher level of innovativeness than those studying in other fields. However, innovativeness does not significantly influence their entrepreneurial intention. On the other hand, other

studies among students have shown that innovativeness significantly influences entrepreneurial intention (Koe, 2016). Thus, we have postulated the second hypothesis:

H2: *Innovativeness positively influences the entrepreneurial intention of female students in Cluj-Napoca.*

Risk-taking, one of the most important dimensions of entrepreneurial orientation alongside innovativeness, denotes the willingness of entrepreneurs to undertake perceived risks in pursuit of their objectives and the attainment of success (Lumpkin and Dess, 1996). According to Gürol and Atsan (2006), risk-taking propensity refers to a person's tendency to either avoid or to take risks when faced with situations involving uncertainty or potential hazards. The willingness of achievement can represent a goal that is meant to motivate a person to take risks (McClelland, 1961). Researchers believe that individuals with a greater risk-taking propensity are more likely to become entrepreneurs and have success (Twum et al., 2021). Studies conducted among students have shown that risk-taking, as a dimension of entrepreneurial orientation influences their entrepreneurial intention (Ilevbare, et al., 2022). As such our third hypothesis is:

H3: *Risk-taking positively influences the entrepreneurial intention of female students in Cluj-Napoca.*

Proactiveness refers to the ability to think and act in an anticipatory manner on future needs and problems or changes in market opportunities (Lumpkin and Dess, 1996; Lumpkin and Dess, 2001). The concept suggests the desire to look for opportunities in advance and to have a future-oriented perspective so that current resources can be used to introduce special services and products before competitors (Lumpkin and Dess, 2001; Rauch et. al, 2009). As in the case of the other dimensions, some studies confirm the link between proactiveness and entrepreneurial intention (Mustafa et al., 2016; Koe, 2016; Lestari, Rizkalla and Purnamaningsih, 2022). In line with this finding, we have formulated the following hypothesis:

H4: *Proactiveness positively influences the entrepreneurial intention of female students in Cluj-Napoca.*

Due to extensive debates among researchers regarding the most optimal way to measure entrepreneurial orientation, certain scholars advocated for the incorporation of additional dimensions into EO (Rauch et. al, 2009, Covin and Miller, 2014). Recent studies have responded to this need by introducing two new dimensions: passion and perseverance (Gerschewski et al., 2016; Santos et al., 2020).

Passion, seen from the perspective of entrepreneurship, was defined as a set of positive emotions felt and experienced by an individual regarding entrepreneurial activity and the roles considered to be important. Passion is a fundamental emotion, being important in everyday activities, but especially in business (Cardon et al., 2009). Some studies confirm the link between passion and entrepreneurial intention. One of these was carried out in 2021 among students in Pakistan and showed that passion help improve students' entrepreneurial intention (Anjum et al., 2021). Accordingly, we have formulated the fifth hypothesis:

H5: *Passion positively influences the entrepreneurial intention of female students in Cluj-Napoca.*

Perseverance is defined as an important pillar in developing the ability to start and lead a business (Baum and Locke, 2004). This dimension of entrepreneurial orientation is closely

related to a continuous pursuit of set goals despite the obstacles that inevitably appear (Van Gelderen, 2012). According to Baum and Locke (2004), perseverance includes maintaining a goal-oriented action and energy, even when adverse situations arise. The inclination to stay focused on goals is associated with entrepreneurial status and success (Covin and Miller, 2014; Gerschewski et al., 2016). Taking these elements into account we have formulated the following hypothesis:

H6: *Perseverance positively influences the entrepreneurial intention of female students in Cluj-Napoca.*

Arrighetti et al. (2016) argued that crisis can negatively affect the rate of new businesses creation, due to worsening economic environment and the deterioration in the quality of business opportunities. Devece et al. (2016) described how push factors related to economic crises can determine people to start a business for two reasons: firstly, due to lack of viable alternatives and secondly, due to difficulties in trying to find a job related to education, race, class, or gender. Considering these aspects, we have postulated the hypothesis:

H7: *The crisis influences the entrepreneurial orientation of female students in Cluj-Napoca.*

Considering all the posited hypotheses the research model represented in Figure 1 is proposed for further analysis.

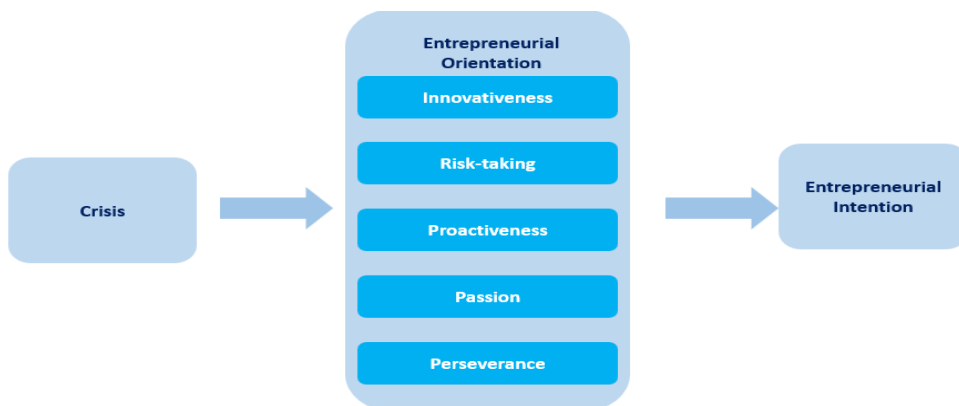


Figure 1. Research model

Source: Author's analysis/processing based on own data

3. Research Methodology

A questionnaire-based survey was conducted in order to collect the data. The questionnaire has been implemented online as this facilitates the collection of responses offering also the possibility to reach a larger number of respondents. The questionnaire was distributed to female students from Cluj-Napoca from all three levels of studies (bachelor, master, and PhD) and all forms of education. The data collection took place between March and June 2023 and we have collected 231 valid responses.

Regarding the characteristics of the sample analysed, 61,9% of the respondents were between 21 and 23 years old, followed by those between 18 and 20 years old, with a percentage of 22,1%. Almost three-quarters of the female students (72,7%) study at "Babeş-Bolyai" University, 13,9% at "Iuliu Hațieganu" University of Medicine and Pharmacy" and 8,2% at Technical University of Cluj-Napoca. The fields of study were Economics (51,1%),

Medicine, Pharmacy and Dentistry (14,3%), Engineering (4,8%), Communication Sciences (4,3%), Computer Sciences and IT (3,9%), Sociology (3,5%) and other fields (18,1%). Considering the study level, 70,1% were bachelor students, 26,8% were master students and 3% were PhD students. Moreover, 8,3% of the respondents currently own a business, while more than half of them (56,7%) have family members who are entrepreneurs (parents, grandparents, siblings, aunts, uncles, or cousins).

The measurement instrument developed and validated by Santos et al. (2020) was used for assessing five entrepreneurial orientation dimensions, namely risk-taking, innovativeness, proactivity, passion and perseverance. The scale developed by Liñán and Chen (2009) was used to measure the entrepreneurial intention of female students. We used the scale developed by Uansa-ard and Wannamakok (2022) to measure the crisis impact. We have adapted this scale to reflect the 2023 crisis by replacing the word “COVID” by “actual crisis”. All items were measured using a 7-point Likert scale (1= “Strongly disagree”, 7= “Strongly agree”).

Table 3: Measurement instrument

Variable	Code	Items	Sources
Risk-taking	RISK1	<i>I like to venture into the unknown and make risky decisions</i>	Santos et al., 2020
	RISK2	<i>I am willing to invest a great deal of time and/or money into something that can give high returns.</i>	
	RISK3	<i>I tend to act boldly in risky situations.</i>	
Innovativeness	INNOV1	<i>I often like to try new and unusual activities.</i>	
	INNOV2	<i>In general, I prefer a strong emphasis on innovative approaches rather than previously tested and used approaches.</i>	
	INNOV3	<i>I prefer, when I learn something new, to try to do it my way than to do it like everyone else does.</i>	
	INNOV4	<i>I am in favour of trying out new approaches to problem solving rather than using methods that others often use.</i>	
Proactiveness	PRO1	<i>I usually act in anticipation of future problems, needs or changes.</i>	
	PRO2	<i>I tend to plan projects in advance.</i>	
	PRO3	<i>I would rather get up and put projects in motion than sit around waiting for someone else to do it.</i>	
Passion	PAS1	<i>I have a passion for finding good business opportunities, developing new products or services, exploiting business applications and creating new solutions for existing problems and needs.</i>	
	PAS2	<i>I am passionate about the process of gathering the financial, human and social resources (e.g. contacts and partnerships) needed to create a new business.</i>	

Variable	Code	Items	Sources
	PAS3 PAS4	<i>I have a passion for envisioning, growing and expanding my business.</i> <i>I am passionate about what I do, and, when I am away from my business, I cannot wait to return.</i>	
Perseverance	PER1 PER2 PER3 PER4 PER5	<i>I have achieved goals that took me some time to reach.</i> <i>I have overcome setbacks to meet major challenges.</i> <i>I always finish what I start.</i> <i>Setbacks do not discourage me.</i> <i>In many complex situations, I persist in achieving my goals despite seeing others give up</i>	
Entrepreneurial intention	INTENT1 INTENT2 INTENT3 INTENT4 INTENT5 INTENT6	<i>I am ready to do anything to be an entrepreneur</i> <i>My professional goal is to become an entrepreneur</i> <i>I will make every effort to start and run my own firm</i> <i>I am determined to create a firm in the future</i> <i>I have very seriously thought of starting a firm</i> <i>I have the firm intention to start a firm some day</i>	Liñán &Chen, 2009
Crisis perception	CRISIS1 CRISIS2 CRISIS3 CRISIS4 CRISIS5 CRISIS 6	<i>I believe that the actual crisis will slightly affect my future career as an entrepreneur.</i> <i>I believe that the actual crisis will slightly affect my future opportunity for my career.</i> <i>I believe that the actual crisis will slightly influence my future plan and decisions.</i> <i>I believe that the actual crisis will slightly influence my future intention to be an entrepreneur.</i> <i>I believe that the actual crisis will slightly influence my thoughts and considerations towards future plans.</i> <i>I believe that I am still confident about my future career as an entrepreneur.</i>	Uansa-ard & Wannamakok, 2022

Source: Authors' computation

4. Results and discussion

In order to be able to analyse all the answers and test the formulated hypotheses, we used the IBM SPSS software. In the first phase, we checked the reliability of each scale used. **Table 2** includes the corresponding Cronbach's Alpha coefficient for each dimension of the entrepreneurial orientation and the scales used to measure the entrepreneurial intention and

the perception of the crisis. We can observe that, in the case of each scale, the coefficient is greater than 0,7, indicating their reliability.

Table 4: Cronbach's Alpha coefficient of IEO dimensions, Entrepreneurial Intention and Crisis Perception

Variables	Items	Cronbach's Alpha
Risk-taking	RISK1 RISK2 RISK3	0,820
Innovativeness	INNOV1 INNOV2 INNOV3 INNOV4	0,834
Proactiveness	PRO1 PRO2 PRO3	0,792
Passion	PAS1 PAS2 PAS3 PAS4	0,925
Perseverance	PER1 PER2 PER3 PER4 PER5	0,858
Entrepreneurial intention	INTENT1 INTENT2 INTENT3 INTENT4 INTENT5 INTENT6	0,959
Crisis perception	CRISIS1 CRISIS2 CRISIS3 CRISIS4 CRISIS5 CRISIS6	0,822

Source: Authors' computation

After checking the reliability of each scale, the next step was to determine the mean average for each of the five entrepreneurial dimensions based on the mean of the items describing them. As shown in **Table 3**, the highest average was recorded for proactiveness. In other words, the female students from Cluj-Napoca participating in this study are strong enough to anticipate needs and opportunities that could appear at the market level. At the opposite pole, however, is passion, which has the lowest average among all five dimensions of entrepreneurial intention. The rest of the dimensions register values above 5, suggesting that female students have relatively high skills in terms of entrepreneurial orientation. To determine the score for the entrepreneurial orientation, we followed the same principle, calculating it as the average of all its dimensions. Thus, the average score for entrepreneurial

orientation was 5,21, meaning that female students from Cluj-Napoca have a reasonably high entrepreneurial orientation.

Table 5: Average scores for entrepreneurial orientation

Variables	Items	Mean	Dimension's mean	Entrepreneurial orientation's mean
Risk-taking	RISK1	4,87	5,13	5,21
	RISK2	5,79		
	RISK3	4,74		
Innovativeness	INNOV1	4,99	5,27	
	INNOV2	4,97		
	INNOV3	5,61		
	INNOV4	5,14		
Proactiveness	PRO1	5,53	5,62	
	PRO2	5,74		
	PRO3	5,61		
Passion	PAS1	4,65	4,68	
	PAS2	4,33		
	PAS3	5,05		
	PAS4	4,69		
Perseverance	PER1	5,46	5,47	
	PER2	5,59		
	PER3	5,54		
	PER4	5,19		
	PER5	5,57		

Source: Authors' computation

Next the formulated hypotheses were tested using linear and multiple regressions. The hypothesis is confirmed, with a probability of 95% if the variable p-Value registers values lower than 0,05.

Table 4 shows the results of the test for the first hypothesis. This hypothesis was confirmed. In other words, the entrepreneurial orientation significantly influences the entrepreneurial intention of female students from Cluj-Napoca. Also, the R² coefficient registers the value 0,51, meaning that 51% of the variation in entrepreneurial intention is due to entrepreneurial orientation. This finding is similar with previous researches (Ibrahim and Lucky, 2014; Ekpe and Mat, 2012) that confirmed the relationship between entrepreneurial orientation and entrepreneurial intention.

Table 6: The influence of entrepreneurial orientation on entrepreneurial intention (linear regression results)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-1.551	.413		-3.759	.000		
OE	1.199	.078	.714	15.448	.000	1.000	1.000

a. Dependent Variable: INTENT

Source: Authors' computation

Table 5 includes the results of testing the five hypotheses referring to the influence of entrepreneurial orientation dimensions on entrepreneurial intention. After analysing the results, it was found that only H5 was confirmed. Therefore, among all dimensions of

entrepreneurial orientation, only passion significantly influences the entrepreneurial intention of female students from Cluj-Napoca. Moreover, 63,8% of the variation in entrepreneurial intention being determined by the variation in entrepreneurial orientation dimensions ($R^2=0,638$). These results are consistent with previous studies conducted among students that also identified that innovativeness (Law and Breznik, 2017), risk-taking (Koe, 2016; Robinson and Stubberud, 2014; Ekpe and Mat, 2012) and perseverance (Urban and Richard, 2015) do not significantly influence entrepreneurial intentions while passion has a positive influence on entrepreneurial intention (Anjun et al., 2021).

Table 7: The influence of entrepreneurial dimensions on entrepreneurial intention (multiple regression results)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>			<i>Tolerance</i>	<i>VIF</i>
(Constant)	-.045	.406		-.111	.911		
RISK	.123	.086	.092	1.436	.153	.395	2.529
INNOV	.068	.097	.047	.709	.479	.365	2.739
PROAC	.132	.087	.084	1.508	.133	.517	1.935
PAS	.708	.055	.686	12.907	.000	.570	1.754
PERS	-.053	.089	-.034	-.599	.550	.489	2.046
a. Dependent Variable: INTENT							

Source: Authors' computation

As results presented in **table 6** show, H7 was confirmed. This means that crisis significantly influences the entrepreneurial orientation of female students of Cluj-Napoca, but explains its variance in a very small percentage ($R\text{ Square}=0.054$) this meaning that there are other external factors that influence the EO of female students. This is consistent with previous research that identified as influencing factors age, work experience, family background (Arrighetti et al., 2016), and education (Nitu-Antonie and Feder, 2015).

Table 8: Crisis influence on entrepreneurial orientation (linear regression results)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
(Constant)	4.380	.242		18.128	.000
Crisis	.188	.052	.231	3.601	.000
a. Dependent Variable: OE					

Source: Authors' computation

Our research provides nuanced results regarding the tested hypotheses. **Table 7** provides a concise overview of the hypotheses examined in our study, along with their corresponding outcomes based on the linear and multiple regression analyses.

Table 7: Summary of the hypotheses testing results

Hypotheses	Results
H1: EO→EI	Supported
H2:INNOV→EI	Rejected
H3:RISK→EI	Rejected
H4:PROAC→EI	Rejected
H5:PAS→EI	Supported
H6:PERS→EI	Rejected
H7:CRISIS→EO	Supported

Source: Authors' computation

5. Conclusions

Entrepreneurship plays an essential role in the development of a healthy economy. Thus, the study of the factors that positively influence entrepreneurship is very important. This study contributes to entrepreneurship research by answering the call for testing new dimensions of individual entrepreneurial orientation by investigating two newly proposed dimensions: passion and perseverance. Also, our study contributes to gender studies by investigating the factors that influence the entrepreneurial intentions of young females in an effort to propose tailored solutions that would enhance their engagement in entrepreneurship. Given the fact that research on these topics in Romania is scarce, we consider that this study offers some insight on the entrepreneurial orientation of young females from Cluj-Napoca. The study of the entrepreneurial orientation of women during their studies is important as students represent an important pool of potential entrepreneurs and because it can offer guidance for educators, policymakers, and support networks aiming to foster entrepreneurship among women.

The first aim of this research was to identify the entrepreneurial orientation of female students from Cluj-Napoca and whether it positively influences their entrepreneurial intentions. As expected, we found a statistically significant influence of EO on EI, consistent with the findings of previous studies. Among the five dimensions of entrepreneurial orientation, namely risk-taking, innovativeness, proactiveness, passion, and perseverance, the results of our regression analysis have revealed that only passion has a significant impact on entrepreneurial intention. This finding underscores the significance of passion as a crucial element in the entrepreneurial intention of female students. From a theoretical perspective, it aligns with previous research that has highlighted the central role of passion in entrepreneurship. Passionate individuals are more likely to pursue entrepreneurial opportunities with determination and enthusiasm, which can lead to the formation of entrepreneurial intentions. While entrepreneurship has traditionally been dominated by males, our findings suggest that passion could be a particularly important driver for female students for considering entrepreneurship as a career path. This highlights the importance of studying entrepreneurship from a gender perspective and tailoring entrepreneurship education and support programs to address the unique needs and motivations of female entrepreneurs.

The second purpose of this study was to investigate the influence of a context of crisis on EO. Our regression analysis indicates that these students' entrepreneurial orientation is significantly and positively influenced by their perception of how the crisis will impact their future entrepreneurial careers. In times of crisis, individuals may become more attuned to opportunities for innovation and problem-solving and assume the risk to pursue their entrepreneurial intentions. Encouraging entrepreneurship, particularly among female students, during times of crisis can contribute to economic recovery and growth. Supportive

policies, such as grants, incubators, and tax incentives, can be tailored to address the specific needs of young female entrepreneurs in these circumstances.

Educational institutions and policymakers can use these findings to design more effective entrepreneurship education programs for female students. Educators should explore innovative approaches to fostering passion among their students. Students should be encouraged to explore their interests and align their entrepreneurial endeavours with their passions as this can increase their commitment to entrepreneurial pursuits. When designing policies and initiatives aimed at promoting entrepreneurship among women, governments should consider the importance of passion. These policies could include financial incentives, access to resources, and networking opportunities that facilitate the pursuit of entrepreneurial passions. The stories of successful female entrepreneurs who credit their success to their persistent passion for their ventures should be promoted by all organizations (public or private) that have a mission in promoting and supporting female entrepreneurship. An important limitation of the current study relates to generalizability, given that it was focused only on a small sample of female students from Cluj-Napoca, Romania. The regional context of an Eastern European country may play a significant role in explaining the observed results. Cultural factors, societal norms, and economic conditions in this region could potentially influence the way female students perceive and pursue entrepreneurial opportunities. Future research could delve deeper into the cultural and contextual factors that may contribute to this unique pattern by investigating a larger group of students from different Western and Eastern European countries.

Our study provides a snapshot of the relationship between entrepreneurial orientation and intention among female students. Longitudinal research designs could provide insights into how these relationships evolve over time. It would be valuable to follow a cohort of female students as they progress through their academic and professional journeys to observe how their entrepreneurial intentions develop and whether passion remains a dominant influence. Moreover, future research should investigate the drivers of entrepreneurial intention on larger samples of other female categories such as employees, females with lower education levels, living in less economically developed regions as they have more difficulties in finding jobs and entrepreneurship could be a solution to generate income, achieve financial independence, and contribute to household and community prosperity.

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