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# The Effect of Personal Entrepreneurial Orientation on Entrepreneurial Intention: The Mediating role of Psychological Capital and Planned Behavior in Public Administration

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# **Abstract**

The present study endeavored to examine the impact of personal entrepreneurial orientation on entrepreneurial intention, with psychological capital and planned behavior serving as mediating factors. In this study, a meticulous conceptual model was employed to analyze the intricate relationship between these variables. The statistical population of the study comprised entrepreneurship activists, with a sample size of 416 managers, supervisors, and employees of organizations who were randomly selected. The data collection tool was questionnaires designed to measure each of the research variables and administered to the statistical population. The structural equation modeling method using PLS software was used to analyze the data. This method was selected due to its high power in modeling complex relationships and measuring latent variables, especially in social and behavioral research. The results of the study showed that all hypotheses were confirmed and the effects of independent variables on the dependent variable were significantly proven. Specifically, the findings indicated that personal entrepreneurial orientation exerts a direct and positive influence on entrepreneurial intention, signifying that individuals with higher levels of entrepreneurial orientation are more predisposed to engage in entrepreneurial activities. The study further demonstrated that psychological capital and planned behavior function as crucial mediating variables in the relationship between personal entrepreneurial orientation and entrepreneurial intention. The results of this study hold significant implications for policymakers, educators, and activists in the domain of entrepreneurship. The findings of the study suggest that educational and counseling programs in the field of entrepreneurship should prioritize the enhancement of individuals' psychological capital and the promotion of planned behaviors in the entrepreneurial process. This can help promote entrepreneurial intention and ultimately increase the rate of entrepreneurship. Consequently, the enhancement of individuals' psychological and behavioral capabilities can be regarded as a viable solution within the framework of entrepreneurship development policies.

**Keywords**: Personal entrepreneurial orientation, entrepreneurial intention, psychological capital, Theory of Planned Behavior, Entrepreneurship Development.

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# 1. Introduction

Entrepreneurship is widely acknowledged as a pivotal catalyst for economic growth and social advancement across diverse societies; For instance, American think tanks play a crucial role in shaping policies that influence entrepreneurship, particularly in the context of individual entrepreneurial orientation (EO) and its impact on entrepreneurial intention. These think tanks often conduct in-depth

studies on economic trends, business development strategies, and the psychological factors that affect entrepreneurial behavior. Their research highlights the importance of psychological capital—self-efficacy, resilience, optimism, and hope—as mediators in entrepreneurial intentions. By examining the relationship between entrepreneurial orientation and the likelihood of individuals pursuing entrepreneurial ventures, think tanks offer valuable insights that can inform policy recommendations. These recommendations aim to foster an environment where individuals are not only encouraged to take risks and innovate but also equipped with the psychological tools to overcome challenges. By advocating for educational programs and policies that enhance psychological capital and encourage planned behavior, think tanks contribute to the broader goal of promoting entrepreneurship and economic growth. Generally and In the contemporary world, marked by rapid economic, social, and technological transformations, the demand for proficient and innovative entrepreneurs is more pressing than ever. Entrepreneurial intention, a pivotal factor in the formation of new business ventures, exerts a substantial influence on the development of entrepreneurial ecosystems. Personal entrepreneurial orientation, defined as the attitudes, beliefs, and individual characteristics of individuals in the field of entrepreneurship, has been shown to play a prominent role in increasing entrepreneurial intention(Elnadi & Gheith, 2023). One of the important factors that can influence entrepreneurial intention is psychological capital. Psychological capital refers to a set of positive psychological characteristics such as self-efficacy, hope, resilience, and optimism that can influence individual motivations and behaviors in the face of entrepreneurial challenges and opportunities. Research has shown that psychological capital can directly and indirectly influence and strengthen entrepreneurial intention, and this capital enables individuals to move towards their entrepreneurial goals with greater selfconfidence and determination (Salavou et al., 2023). Also, planned behavior is known as another effective variable in entrepreneurial intention. According to the theory of planned behavior, individual behaviors are influenced by attitudes, social norms, and perceived control. Especially in the field of entrepreneurship, planned behavior can lead to the formation of entrepreneurial intention and, as a result, the launch of new businesses(Sampene et al., 2023). In fact, people who plan more carefully towards their entrepreneurial goals and move based on strategic analysis are more likely to realize their entrepreneurial intentions. Today, with increasing environmental uncertainty, rapid changes, and new global challenges, one of the effective solutions to adapt to continuous developments and to get ahead of competitors is to tend towards entrepreneurship, because the environment facing today's societies is constantly changing, and it is entrepreneurs who provide a model for coping with and adapting to these rapidly changing and dynamic conditions, and individuals are also considered an important element in the work and entrepreneurship process. Paying attention to entrepreneurial activities can contribute significantly to economic growth and development(Zhakupov et al., 2023). Also, wealth creation, technological development, and productive employment are three important reasons to pay attention to entrepreneurship (Adenutsi, 2023). According to experts, entrepreneurship is an effective solution for economic and social development in today's competitive and changing world(S. S. Lee, 2023). The creation, development, and promotion of entrepreneurial behavior depends on various factors such as psychological and personality characteristics of individuals, as well as environmental and structural factors (Antončič & Auer Antončič, 2023). Entrepreneurship is one of the main aspects of socio-economic development (Zhakupov et al., 2023). Entrepreneurs play a crucial role in economic development due to their extraordinary contribution to economic growth; Researchers have shown that intention plays an important role in the decision to start a new entrepreneurial venture (J. M. Martins et al., 2023). On the other hand, there are many models in determining the behavior of active individuals in the entrepreneurial field, including the theory of planned behavior. The theory of planned behavior is an important social cognitive model that aims to explain variance in voluntary behavior(Mohi Ud Din & Zhang, 2023). This theory is one of the most reliable predictors of an individual's behavior in relation to the decisions they make. In the theory of planned behavior, individuals' beliefs and attitudes toward a behavior are examined (Abid & Jie, 2023). The most important goal of this theory is to understand and predict the motivational factors that influence an individual's motivation and behavior. This theory attempts to explain the relationships between individuals' attitudes toward behavior, subjective norms, perceived behavioral control, individuals' motivation, and their behavior. Arguing that first, individuals make their behavioral decisions based on a rational and logical

examination of the information available to them and second, they consider the consequences of their actions before making a decision, Ajzen (1991) has proposed a rational behavior model to predict and explain the behavior of individuals. In the theory of planned behavior, a guideline is given for creating perceived behavioral control. Accordingly, the planned behavior model predicts the occurrence of a specific behavior, provided that the individual has the intention and motivation to perform it. According to this model, the intention to perform a behavior is predicted by three factors including attitude towards the behavior, subjective norms, and perceived behavioral control. Attitude towards behavior is composed of two substructures: behavioral beliefs and evaluation of behavioral outcomes, which lead to an attitude towards behavior(Antončič & Auer Antončič, 2023). Also, subjective norms refer to the perceived social pressures on individuals to perform or not perform a behavior(Al-Swidi et al., 2014).

Previous studies by researchers have shown that an entrepreneurial orientation is significantly related to entrepreneurial intention(Do & Dadvari, 2017). Also, psychological capital is a strong predictor of successful entrepreneurship(Jin, 2017) and is positively related to entrepreneurial intention(Ghani et al., 2013). These findings theoretically and empirically demonstrate that psychological capital is positively related to increased performance and positive attitudes. Psychological capital is a new paradigm in developed countries, but it is believed to play a fundamental role in entrepreneurial practices (Yousaf et al., 2015). Although the role of positive psychology is widely recognized, the empirical literature on how psychological capital can be applied to entrepreneurs is still limited. Furthermore, some studies have separately examined the role of attitude, social capital, and psychological capital in developing intentions to start a new business (Mahfud et al., 2020), but few empirical studies have examined the interaction between these factors. A starting point for justifying entrepreneurship education can be understood as a means of acquiring skills, among other skills, passion, happiness, commitment and creativity among entrepreneurs. The impact of entrepreneurship education on the development of entrepreneurial competencies not only in terms of generating investment but also in improving the recognition of opportunities and capabilities to cope with a globalized world with changing economies has been an important topic of academic studies in the last two decades (Nabi et al., 2018). In turn, the Theory of Planned Behavior (TPB) has been established as the main framework for explaining entrepreneurial intention (EI) and its three dimensions (Attitude Towards Behavior - ATB, Subjective Norms - SN, and Perceived Behavioral Control - PBC). However, the drivers of ATB, SN, and PBC have not yet been investigated, and therefore, the discussion of drivers and barriers to entrepreneurial intention remains an unfinished topic and remains on the research agenda in the field of entrepreneurship. Considering the above, entrepreneurial orientation at the individual level emerges as a construct that encompasses the cognitive aspects of the individual related to behavioral motivation (I. Martins & Perez, 2020). There is currently little information on the impact of personal entrepreneurial orientation on entrepreneurial intention. The findings may shed light on the debate about the role of personal entrepreneurial orientation in the development of intention to start a business. This study provides new evidence that explains the phenomenon of entrepreneurial intention, characterizing individual behavior through the planned behavior framework. The remaining structure of this paper is as follows: The next section presents a literature review and previous studies in support of the hypotheses. Section 6 describes the research methodology. Section 7 presents the analytical findings and Section 8 discusses the findings and conclusions.

#### 2. Research literature

# 1) Personal entrepreneurial orientation

Entrepreneurial orientation (EO) is usually studied as the inclination of top managers or owners towards entrepreneurship, which is classically defined with three sub-concepts: risk-taking, innovativeness and proactiveness(Wales et al., 2021). As a result, entrepreneurial behavior is increasingly viewed as a firm-level phenomenon(Hughes et al., 2021). Recently, however, the EO literature has considered that firm performance is a function of organizational behavior as well as individual-level behavior, and that individual-level behavior by the entrepreneur may influence organizational actions, and in many cases, the two will be synonymous. From this it can be concluded that a firm's capacity for entrepreneurship is closely

related to the EO (and behavior) of its individual members (Covin et al., 2020). Based on this recent stream of research, we define personal entrepreneurial orientation as an individual employee's tendency that emphasizes innovation, proactivity, and risk-taking behaviors in the workplace. There is often a need for innovation competence at the employee level (Keil et al., 2017). For example, among technical staff or people who are in customer contact (Hayton & Kelley, 2006). Employees who are entrepreneurially oriented are also more likely to actively direct their time and other resources toward entrepreneurial opportunities to effect change (Mustafa et al., 2018). Finally, employees who are entrepreneurially oriented are more likely to take risks, such as challenging the status quo to influence company policy and allocating resources to support their entrepreneurial inclinations (Jong et al., 2015).

# 2) Entrepreneurial intention

Entrepreneurial intention represents the effort that an individual will make for entrepreneurial behavior in the future; therefore, entrepreneurial intention can be examined through three main constructs: attitude toward behavior, subjective norms, and perceived behavioral control(Ajzen, 1991). A number of researchers, including Shapero and Sokol(1982) More than anyone else, they have emphasized the important role of intention. Entrepreneurship is a process in which intention plays a key role. Entrepreneurial intention is the link between the entrepreneur as an individual and the context in which the business is formed. Researchers believe that a large part of what is called entrepreneurial activity is a direct result of individuals' intentions and subsequent activities over a certain period of time(Krueger, 2017). Entrepreneurial intention has been mentioned as one of the underlying factors of behavior. Entrepreneurial intention is defined as a conscious state of mind that precedes action(Molaei et al., 2014).

# 3) Psychological capital

In recent decades, the topic of psychological capital has grown significantly in universities and educational environments (Zhang & Bartol, 2010). Psychological capital has also been recognized as an important source of competitive advantage and a determinant of organizational behavior effectiveness. Furthermore, the concept of psychological capital initially evolved from the positive psychology movement, and unique components of psychological capital have been adapted from the fields of education and psychology (F. Luthans & Youssef, 2007). Psychological capital has often been both theoretically proven (Brett C Luthans et al., 2014) and empirically demonstrated (Avey et al., 2010), whether psychological capital is a central concept or a multidimensional concept. The concept of psychological capital was developed by researchers and includes four components: self-efficacy, optimism, hope, and resilience (Brett Carl Luthans et al., 2012). In the present study, this classification has been used for psychological capital, which will be explained below.

The first element is **self-efficacy**: Self-efficacy, which originated in Bandura's (1986) research and cognitive theory, and can be simply called self-confidence. It is defined as: an individual's belief or confidence in his or her abilities to successfully perform specific tasks, and this success will be achieved through self-motivation, providing cognitive resources for oneself, and performing and implementing the necessary actions (Schunk, 1995).

The second element of **optimism**: The psychological capital model considers optimism as an explanatory method that attributes positive events to internal, permanent, and pervasive issues and attributes negative events to temporary and specific conditions (Hosseinpour & Alizadeh, 2012). Optimism is the way in which a person understands and interprets recent or past experiences, and optimism is a three-stage process that tends to progress, including taking it easy on the past, understanding the value of something in the present, and creating opportunities to understand the future(Chambers & Windschitl, 2004).

The third element is **hope**: which is similar to optimism and is characterized by activity and thought. Hope does not simply include the will and motivation to achieve set goals; it also includes the capacity and scope for training in the face of difficulties on the way to achieving goals. Hope intervenes in education and focuses on designing goals, creating a path, and overcoming obstacles (Snyder et al., 2002).

The fourth element is **resilience**: Resilience can positively or negatively adapt a person's capacity to perceive what they have experienced. Resilience may be built by using positive emotions. The main characteristic of resilience is the ability to bounce back from failure or make fundamental changes(You et al., 2014). Although research in the academic environment on psychological capital is limited, findings generally support the positive impact of psychological capital on learning empowerment (K.-Y. Lee & Song, 2010). Luthans et al. (2014) showed that an active approach to psychological capital for students leads to the promotion of learning and overcoming barriers to academic success, which fosters psychological strengths.

The findings from studies on psychological capital and empowerment show that capital is related to empowerment. According to Lee and Song (2010), psychological capital in Korean students is positively related to learning empowerment and it was found that psychological capital is a significant predictor of empowerment. Therefore, psychological capital is understood as a significant antecedent of empowerment. The relationship between psychological capital and engagement can be inferred from the components of capital and learning. Extensive research has consistently confirmed that positive self-efficacy is related to the use of cognitive strategies and achievement (Schunk, 1987).

# 4) Planned behavior

Behavior is the set of actions or reactions of a person to a situation, which may be conscious or unconscious, voluntary, intentional or involuntary(Jung, 1985). Identifying the factors affecting the behavior of individuals is important for predicting their reactions in different situations and managing them in different situations. There are various theories in this regard. Among the most widely used theories in the field of determining the factors affecting and predicting the behavior of individuals is the theory of planned behavior (planned behavior). This theory is a social cognitive decision-making model and is a practical framework for predicting and explaining individuals' health characteristics and behaviors (Ajzen, 1985).

The Theory of Planned Behavior was first proposed by Ajzen and (1985). This theory is derived from the Theory of Reasoned Action. According to both theories, the most important factor predicting an individual's behavioral management is the individual's intention to perform the behavior, which includes motivational factors affecting a behavior and is directly guided by three factors: 1- Attitude towards the behavior, 2-Mental norms, and 3- Perceived behavioral control. These three factors predict the individual's behavioral intention (behavioral tendency) to perform a desired behavior(Ajzen, 1991). Behavioral intention refers to an individual's decision to perform a behavior, and attitude refers to an individual's positive or negative evaluation of the outcomes of a particular behavior (called behavioral beliefs). Subjective norms refer to the perceived pressure from important people in an individual's life to perform or not perform a particular behavior, perceived behavioral control, and the individual's confidence in their ability to perform a particular behavior(Feltz & Chase, 1998).

#### 3. Research background

Ozgen and Tangur (2022) examined the mediating role of cognitive flexibility on the relationship between trait positive/negative affectivity and conscientiousness with individual entrepreneurial orientation. A total of 508 undergraduate students (175 males and 333 females) participated in this study. Three separate mediation analyses were conducted. The results showed that cognitive flexibility partially mediated the relationship between trait positive affectivity and individual entrepreneurial orientation as well as the relationship between conscientiousness and individual entrepreneurial orientation. The results also showed that cognitive flexibility fully mediated the relationship between trait negative affectivity and individual entrepreneurial orientation. The findings of this study suggest that interventions and personal development programs may be conducted to increase the cognitive flexibility of individuals with high levels of trait negative affectivity, low levels of conscientiousness, and low levels of trait positive affectivity. This may potentially enhance their levels of individual entrepreneurial orientation.

In their research, Martinez et al. (2022) investigated the development of orientation to achieve entrepreneurial intention: a pre-test-post-test analysis of entrepreneurship education programs. This

article develops and tests a model regarding the effects of entrepreneurship education programs on individual entrepreneurial orientation (personal entrepreneurial orientation) and the role of personal entrepreneurial orientation as an antecedent of entrepreneurial attitudes and intention (EI) through the dimensions of the Theory of Planned Behavior (TPB). This study, considering 1723 Colombian and Ecuadorian undergraduate students, confirmed the effect of entrepreneurship education programs on personal entrepreneurial orientation from a "pre-test-post-test analysis" with "sign test data" and "Wilcoxon signed-rank test".

Sherkat and Chenari (2022) investigated the effectiveness of entrepreneurship education in universities in Tehran province based on the entrepreneurial intention model. The main research question in this article is to investigate the effectiveness of entrepreneurship education in universities in Tehran province. Considering entrepreneurial intention as an indicator of the effectiveness of entrepreneurship education, for the first time the effect of the entrepreneurship curriculum, entrepreneurship education, and university entrepreneurial climate on the goal, implementation intention, and commitment of entrepreneurs has been investigated. In this study, using a questionnaire designed by the authors, data were collected from a random sample of 205 master's degree entrepreneurs in the faculties of entrepreneurship, management, and economics of selected universities. Analyses conducted using Pearson's correlation coefficient, confirmatory factor analysis, and structural equation modeling on cross-sectional data confirm all research hypotheses and show that there is a significant positive relationship between entrepreneurship education and the goal, implementation intention, and commitment of entrepreneurs to them.

Dimos et al. (2022)conducted an analysis of the relationship between team psychological capital and innavation with team learning as the mediating variable, with the main objective of the study. A field study was conducted that included 124 work teams belonging to organizations from different sectors of activity. The hypotheses were tested through PROCESS. The results indicate a direct positive relationship between team psychological capital and team innovation and an indirect effect of team psychological capital on team innovation through team learning. The findings of this study highlight the role of team learning as an intervening process between team psychological capital and team innovation. Accordingly, managers should seek to develop team psychological capital and learning behaviors among their teams to promote innovation.

Martins and Perez (2020) examined the mediating effect of personal entrepreneurial orientation on the relationship between proximate environmental factors and entrepreneurial intention. Drawing on the entrepreneurial intention (EI) literature, this paper develops and tests a model that aims to explain student EI by considering the valuation of entrepreneurship and the stigma of investment failure in the respondent's proximate environment and the role of personal entrepreneurial orientation. Personal entrepreneurial orientation (through direct and indirect effects). This paper uses a survey method to collect data. Thus, this study was conducted with a sample of 1155 undergraduate students from different disciplines. Structural equation modeling is used to validate the theoretical model. The findings indicate that positive proximate valuation of entrepreneurial EI facilitates entrepreneurs. More importantly, personal entrepreneurial orientation plays a significant mediating role in both of these relationships. The findings provide important theoretical and practical implications for the field of entrepreneurship education and entrepreneurial behavior. This paper provides new insights into the cognitive elements of the environment and their impact on EI, in addition to demonstrating how personal entrepreneurial orientation plays a decisive role in shaping these relationships. The proposed model is original and connects two widely valid constructs, and illustrates the relationship that may exist between orientation and actual intention to start a business. Furthermore, personal entrepreneurial orientation has rarely been considered to confirm interaction effects. This paper is one of the first studies to use personal entrepreneurial orientation (individual level of entrepreneurial orientation) as a mediating variable.

Mahfud et al. (2020) investigated the effect of social capital and entrepreneurial attitude orientation on entrepreneurial intentions: the mediating role of psychological capital. This study aimed to develop a structural model for the formation of entrepreneurial intention of polytechnic entrepreneurs, which includes the interaction effect of entrepreneurial attitude orientation, social capital and psychological

capital. Data were collected randomly through an online questionnaire completed by 215 polytechnic students in Indonesia. Structural equation modeling analysis was used to examine the structural model of entrepreneurial intention development. The results show that entrepreneurial attitude orientation, social capital and psychological capital affect the entrepreneurial intention of polytechnic entrepreneurs in a cooperative and interactive manner. Psychological capital was shown to have a positive partial mediating effect on the relationship between entrepreneurial attitude orientation and entrepreneurial intention. Finally, psychological capital also fully mediated the effect of social capital on entrepreneurial intention. The findings of this study are discussed and suggestions with implications for those involved in vocational education are presented.

Do and Dadvari (2017) examined the influence of the dark triad on the relationship between entrepreneurial attitude orientation and entrepreneurial intention: Machiavellianism, narcissism, and psychopathy, a study among entrepreneurs at a Taiwan university. Entrepreneurial attitude orientation refers to an individual's attitude toward starting a new venture, such as innovation, risk-taking, need for achievement, self-confidence, and locus of control. These elements have been known to predict entrepreneurial intention. While previous research on the influence of personality has focused on positive aspects, recently the dark triad, a set of personality traits that include Machiavellianism, narcissism, and psychopathy, has been found to predict personal and organizational achievement. Given that the new generation of entrepreneurs are more self-reliant and self-confident, it is suggested that the dark triad may mediate the relationship between entrepreneurial attitude orientation and entrepreneurial intention. Structural equation modeling was used to test the hypotheses based on a sample of 295 college students in Taiwan. In addition to a significant positive relationship between entrepreneurial attitude and entrepreneurial intention, the effect of the dark triad was also found as a mediator. The results suggest that individuals in the dark triad are more likely to intend to engage in entrepreneurial activities, which advances our knowledge about the entrepreneurial decision-making process.

# 4.Conceptual research model

The conceptual model of the research that examines the relationship between the variables of the impact of personal entrepreneurial orientation on entrepreneurial intention: the mediating role of psychological capital and planned behavior is shown in the diagram below:

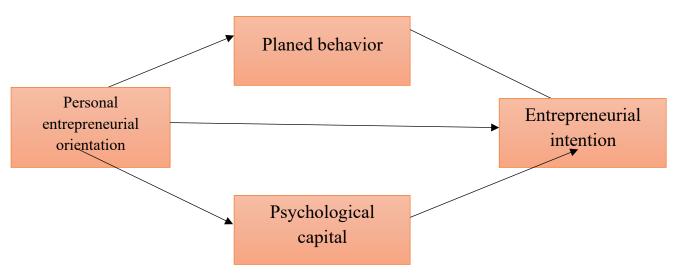


Figure 1: Conceptual research model

# 5. Research hypotheses

- 1) Personal entrepreneurial orientation has a significant effect on planned behavior.
- 2) Personal entrepreneurial orientation has a significant effect on psychological capital.

- 3) Personal entrepreneurial orientation has a significant effect on entrepreneurial intention.
- 4) Planned behavior has a significant effect on entrepreneurial intention.
- 5) Psychological capital has a significant effect on entrepreneurial intention.
- 6) Personal entrepreneurial orientation has a significant effect on entrepreneurial intention with the mediating role of planned behavior.
- 7) Personal entrepreneurial orientation has a significant effect on entrepreneurial intention with the mediating role of psychological capital.

#### 6. Research method

In this study, the method of library study and review of content texts as well as field methods are used to collect information. The data collection tool in this study is a questionnaire, which is a questionnaire used for this purpose in the research of Mahfoud et al. (2020) and Martins et al. (2020). The validity and reliability of this questionnaire are presented in the table below. The statistical population of the present study is the activists in the field of entrepreneurship, which was obtained with the Cochran formula, a sample of 416 people, and the questionnaire was distributed and collected through stratified random sampling. The present study is applied research in terms of the type of purpose. Applied research is defined as a type of research that is intended to generate applicable knowledge within a particular field of study. In other words, applied research is directed towards the practical application of knowledge, and the results obtained from applied research are used to facilitate executive operations or solve its problem. The present study employs a descriptive research method, which is defined as the process of systematically and objectively documenting the characteristics of a phenomenon or system. The research design is of a descriptiveanalytical nature, utilizing a survey method and a correlation type to examine the relationship between variables. The research is applied in terms of its purpose. It is also quantitative in terms of the type of information required and in terms of the method of collecting survey information. In order to analyze the data obtained from the collected questionnaires, at the descriptive level of percentage and frequency with SPSS software and at the inferential level, and in order to test the research questions, due to the insufficient sample size for using covariance-based software to perform structural equations, PLS software was used to implement structural equation modeling; using the internal model, the research hypotheses of the model can be examined.

The table below shows the validity and reliability results of the questionnaire questions:

Table 1: Cronbach's alpha, composite reliability, and AVE values for research components

Index		Number of questions	AVE	Combined reliability	Cronbach's alpha
entrepreneurial orientation	Personal	10	559/0	926/0	912/0
repreneurial intention	Entrepreneurial intentio		536/0	901/0	874/0
Psychological capital	Psychological capita		647/0	928/0	909/0
Planned behavior	Planned behavi		747/0	936/0	914/0

# 7.Statistical results

As is clear from the data in Table (2), 29.7% of the respondents are female and 70.3% are male. Also, the age of most respondents (39.9%) is between 35 and 50 years old and the least of them (26.6%) is over 50 years old. And the education of most respondents (39.2%) is bachelor's degree and the least of them (14.6%) is diploma or less.

Table 2. Demographic characteristics of the statistical sample

	Woman	Man				
Gender	WOIIIaii	ividii				
Gender	94(29.7%)	222(3.70%)				
	Under 35 years	t- 50	Over 50 years			
Age	old	to 50 years 35	old			
	84(26.6%)	126(39.9%)	106(33.5%) 126(39.9%)			
	Diploma or	Postgraduate	Bachelor's	s degree	Master's	
Education	less	diploma	degree	and above		
	46(14.6%)	63(19.9%)	124(39.2%) 63(19.		83(26.3%)	

Structural model, a model in which the relationships between independent (external) and dependent (indirect) latent variables are considered. The structural model examines only the latent variables along with the relationships between them.

In Figures (2) and (3), the standard estimation coefficients and significant numbers of the structural model of the research are observed.

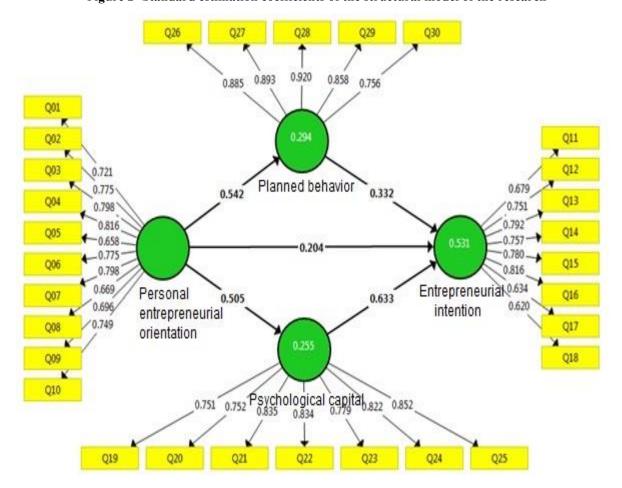


Figure 2- Standard estimation coefficients of the structural model of the research

Figure 3- T-value significance coefficients of the structural model of the research

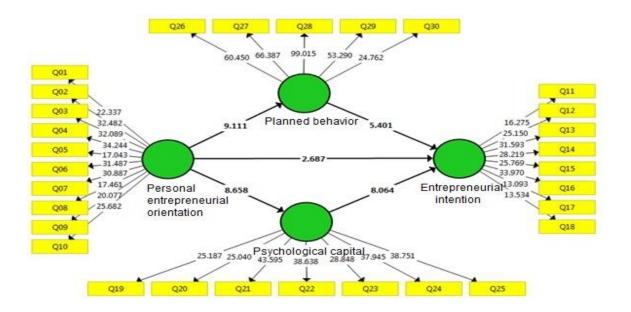


Table (3). Indicators for assessing the adequacy of the research model

$f^2$	$Q^2$	$R^2$	Variable
			Entrepreneurial orientation
	305/0	294/0	Planned behavior
	252/0	0/255	Psychological capital
201/0	360/0	531/0	Entrepreneurial intention

Three values of 0.19, 0.33, and 0.67 were used  $R^2$  as the criterion values for weak, medium, and strong values, respectively

Three values of 0.02, 0.15, and 0.35 represent  $Q^2$ , low, medium, and strong predictive power respectively

Three values of 0.02, 0.15, and  $0.35f^2$  represent small, medium, and large effect sizes, respectively

# Review of the general model of research hypotheses:

The overall model includes both the measurement model and the structural model, and once its fit is confirmed, the fit will be examined in a complete model. There is only one criterion for examining the fit of the overall model, called GOF(goodness of fit). The GOF criterion was developed by Tenenhaus et al.(2004) and is calculated according to the formula in the table.

Table (4). Results of overall model fit with GOF criterion

<u>R<sup>2</sup></u>	<u>Communalities</u>	$GOF = \sqrt{\underline{Communalities} \times \underline{R^2}}$
0/360	0/482	0/421

As can be seen in Table (3), the average value of the common values (Communalities) is 0.482 and  $R^2$  is 0.360 has been obtained and according to the formula, the value of the GOF criterion was obtained as 0.421, which

is greater than the criterion value of 0.3 and indicates a strong fit of the overall research model. The high GOF criterion strongly confirms the overall model and allows entry into the hypothesis testing section.

Table (5). Results from the evaluation of the structural model to examine the research hypotheses

Test result	Significant number (t-value)	Path coefficientβ	Route	Row
Confirmation	111/9	542/0	Personal entrepreneurial orientation←Planned behavior	1
Confirmation	658/8	505/0	,Personal entrepreneurial orientation← psychological capital	2
Confirmation	687/2	204/0	Personal entrepreneurial orientation← Entrepreneurial intention	3
Confirmation	401/5	332/0	,Planned behavior ←entrepreneurial intention	4
Confirmation	064/8	633/0	Psychological capital←of entrepreneurial intention	5

Hypothesis 6: Personal entrepreneurial orientation has a significant effect on entrepreneurial intention with the mediating role of planned behavior.

To examine this hypothesis, the bootstrap method was used. In this method, if the lower and upper limits of the bootstrap are both positive or both negative and zero is not between these two limits, then the indirect path is significant and the hypothesis will be accepted. Also, if the significance level is less than 0.05, the indirect effect is accepted.

Based on this index, the significance or non-significance of the indirect path is presented in Table 5:

Table 6. Results of the bootstrap method to examine the significance of the indirect effect

Significance	Estimatio n error	t-	Bootstrap value		Indirect	Route		
level		statistic	Lower limit	Upper limit	er effect	Dependent variable	Mediating variable	Independen t variable
0/001	0/048	056/3	0/075	291/0	0/180	Entrepreneuri al intention	Planned behavior	Entrepren eurial orientatio n

According to Table 5, the significance level is equal to 0.001 and smaller than 0.05 and the confidence interval does not include zero. Therefore, the research hypothesis is accepted. This means that; personal entrepreneurial orientation has a significant effect on entrepreneurial intention with the mediating role of planned behavior. Hypothesis 7: Personal entrepreneurial orientation has a significant effect on entrepreneurial intention with the mediating role of psychological capital.

Table 7. Results of the bootstrap method to examine the significance of the indirect effect

Bootstrap value	Route

Signific ance level	Estima tion error	t- statisti c	Lower limit	Upper limit	Indirect effect	Dependent variable	Mediating variable	Independ ent variable
0/001	0/048	056/3	0/075	291/0	0/180	Entrepreneuri al intention	Planned behavior	Entrepren eurial orientatio n

According to Table 6, the significance level is equal to 0.001 and smaller than 0.05 and the confidence interval does not include zero. Therefore, the research hypothesis is accepted. This means that; personal entrepreneurial orientation has a significant effect on entrepreneurial intention with the mediating role of psychological capital.

# 8. Conclusions and Suggestions

#### 1-8-Discussion and Conclusion

Education has been identified as a pivotal factor in addressing the issue of unemployment in various countries. Prospective entrepreneurs, through their educational endeavors, are recognized as a significant component in addressing this challenge. The fundamental issue underlying the prevalence of unemployment can be attributed to the scarcity of available employment opportunities. The increase in the number of education graduates has not been balanced by expanding or adding jobs. The paucity of new companies has been identified as a key factor in the creation of employment opportunities. In light of this, the present study explores the potential of entrepreneurial intention to stimulate the formation of new companies. Consequently, a comprehensive understanding of the mechanisms underlying this phenomenon is imperative to enhance the entrepreneurial intention of entrepreneurs. The findings of this study suggest that these factors play a crucial role in the development of entrepreneurs' entrepreneurial intention. In particular, the orientation of entrepreneurial attitude has a significant direct effect on entrepreneurs' entrepreneurial intention. Therefore, vocational educators in countries should promote positive attitudes towards entrepreneurship to entrepreneurs in order to support their intention to start new businesses in their fields. These results are consistent with the results of previous studies discussing the role of attitudes. Entrepreneurial attitude directly influences an individual's intention to start a new business. Entrepreneurs' positive attitudes toward entrepreneurship (such as perceptions of progress, self-esteem, personal control, and innovation) should be developed during the entrepreneurial learning process. Previous studies on entrepreneurial learning have shown that "real" learning that involves entrepreneurs' business activities can help instill individual entrepreneurial attitudes and increase entrepreneurs' intention to create entrepreneurial opportunities. Our study showed that psychological capital partially mediates the effect of entrepreneurial attitude orientation on entrepreneurial intention. This means that entrepreneurial attitude orientation has both a direct and an indirect effect on entrepreneurs' intention to start a new business. The immediate effect is shown in the effect of entrepreneurial attitude orientation on entrepreneurial intention, while the indirect effect is shown in the effect of entrepreneurial attitude orientation on entrepreneurial intention through entrepreneurs' psychological capital. The presence of positive psychological traits such as self-efficacy, optimism, hope, and resilience were shown to increase students' entrepreneurial intentions. These results reinforce the results of a previous study (Jin, 2017), which showed that hope, resilience, and self-efficacy positively affect the intention to start a business, but optimism does not. It also showed that entrepreneurial intention requires not only a strong desire, which is reflected in a positive attitude towards entrepreneurship, but also a strengthening of personal feasibility to start a new company through increasing their psychological capital. These empirical results reinforce previous theory that entrepreneurship intention is influenced by the desirability and feasibility of the business plan (Shapero & Sokol, 1982). Various results in this study indicate that social capital does not have a direct effect on entrepreneurial intention. These findings indicate that the student's social environment is not fully supportive of entrepreneurship. Their social interactions are more with family, friends, other

entrepreneurs, and professors, rather than entrepreneurs. Of course, it does not correspond to the optimal conditions for entrepreneurship described by previous studies, which show that the willingness to start a business is more likely to be formed if the entrepreneur receives support from people close to him, an attitude of appreciation from the community, and trust from the business. This study contributes to the emerging literature on entrepreneurship education and entrepreneurial intention at several levels. First, our results increase the explanatory power of entrepreneurship education by providing a more comprehensive theoretical framework. Such results are obtained through the use of a traditional framework such as the theory of planned behavior, but also include an emerging construct at the individual level that is still under-explored in the entrepreneurship education literature: this paper is one of the first studies to draw on the entrepreneurship education literature. Second, the findings provide a unique perspective on the role of entrepreneurial orientation at the individual level as an antecedent of attitudes toward self-employment, subjective norms, and perceived behavioral control. Therefore, new insights are provided regarding individual competencies for entrepreneurial activity and their impact on entrepreneurial intention through the theory of planned behavior dimensions.

# 8-2- Practical suggestions:

- 1. Strengthening psychological capital in entrepreneurship training programs: Since psychological capital (including characteristics such as self-efficacy, resilience, hope, and optimism) can influence entrepreneurial intention, it is suggested that entrepreneurship training programs and workshops focus more on strengthening these characteristics. In particular, these programs can be specifically designed to strengthen resilience and self-efficacy in facing entrepreneurial challenges.
- 2. Encouraging planned and strategic behavior in entrepreneurial activities: Planned behavior is one of the key factors in realizing entrepreneurial intention. Therefore, it is suggested that entrepreneurs and innovators pay attention to learning and using strategic planning techniques and accurate economic and market analyses. This can lead to the formation of more accurate and successful entrepreneurial plans.
- 3. Develop supportive policies to promote entrepreneurship: Given that personal entrepreneurial orientation can have a significant impact on entrepreneurial intention, policymakers should have programs to develop and strengthen this trait in individuals. In particular, these policies can include individual counseling, provision of financial resources, and legal protections for young entrepreneurs.
- 4. Create supportive and motivating environments for entrepreneurs: In order to strengthen entrepreneurial intention, it is suggested that more entrepreneurial environments be created where individuals can benefit from social support and psychological resources. These environments can include support networks for entrepreneurs, mentors, and counseling groups that increase self-confidence and hope among entrepreneurs.
- 5. Providing specialized courses for managers and supervisors in the field of entrepreneurship development: For managers and supervisors of organizations, it is suggested that specialized training courses be held to strengthen entrepreneurial skills, recognize innovative opportunities, and manage entrepreneurial risks. These courses can specifically focus on creating an entrepreneurial culture within organizations and help managers use planned behavior in their strategic decision-making.

#### 9-Limitations

The main limitation is that this study did not use measurements conducted in the field of entrepreneurship on several variables such as social and psychological capital. The instruments used to measure social capital and psychological capital were general in their approach. We suggest the development of specific instruments to measure social capital and psychological capital in the field of entrepreneurship. This study also collected self-reported data, introducing the potential for bias. Therefore, future research should involve other respondents to obtain more objective results. In the future, systematic studies should be conducted on models that examine the role of different explanatory variables for social capital and entrepreneurial attitude.

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