

# The TBP and Entrepreneurial Motivation: How Do Institutional Pillars and Entrepreneurial Education Foster Tunisian Students' Entrepreneurial Intention?

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## ABSTRACT

To stimulate economic growth, different governments have considered institutional frameworks and policies in place to support entrepreneurship. Nonetheless, a number of studies have demonstrated that institutional and individual factors influence entrepreneurial intentions in different ways, which contributes to inefficiencies. Therefore, the purpose of this research is to analysis the relationship between a set of personal and contextual factors and entrepreneurial intention. Using the PLS-SEM software a mediation analysis was conducted on data gathered from a sample of 367 undergraduate Tunisian students. The results indicated that the TPB not only has direct influence on entrepreneurial intention but that it also has a positive mediation effect on the influence of institutional pillars on entrepreneurial intention. The results of this study highlight the relevance of the interactive effects of personal characteristics, education, motivation, and government policies on entrepreneurial intention. Therefore, this study adds to the body of entrepreneurship literature in two ways: first, by confirming the strong findings that public support is among the best indicators of entrepreneurial intention (EI): we confirmed that in the Tunisian society, entrepreneurship is a socially supported behaviour and is regarded as an appropriate career option. Second, we provided a framework for future research to address the paradoxical findings, according to Shirokova et al. (2020), similar organizations and resources for entrepreneurship may yield different outcomes under different circumstances, which contradicts our findings.

**Keywords:** Entrepreneurial intention · Institutional theory · Theory of planned behaviour · Entrepreneurial education, Entrepreneurial motivation.

**Jel Classification Indices:** L26, A13, P37, M48

## INTRODUCTION

Entrepreneurship is a universal phenomenon that contributes to the economic growth all over the world, it's defined by the emergence of newly creative businesses (Caputo and Pellegrini, 2020). Along with coming up with creative and new business ideas, entrepreneurs have acquired a variety of behaviours, abilities, skills and attitudes that help them play an important role in their society (Nabi and Liñán, 2011; Liao et al. 2022). Trainings and interactions with organizations that support entrepreneurs tend to favour the intention to start a business (Ahn - Winters 2023; Miranda et al. 2017). As a result, governments work to implement advanced entrepreneurship promotion strategies in an effort to address innovative challenges for national development and solve national socioeconomic problems. More specifically, universities focus their curricula on entrepreneurship knowledge and the development of entrepreneurial intentions (Gangi 2017; Preradovic and Micic 2020).

Numerous studies have examined the role that entrepreneurship plays in the economic development of a nation as well as the characteristics that encourage entrepreneurship, especially among university students (Petković, 2017). The Theory of Planned Behavior (TPB) states that entrepreneurial intention is highly influenced by motivational factors including beliefs on outcomes, as well as the importance of these factors in predicting intention varies depending on population, contextual factors, and individual behaviors (Ajzen 1991, Teixeira et

al., 2018). Accordingly, numerous studies have investigated entrepreneurial intention and its antecedents in recent decades (Linan and Fayolle 2015). Researchers have investigated how entrepreneurial urges are fostered at regulatory, normative, and cultural-cognitive institutions (Valdez and Richardson 2013; Urbano and Alvarez 2014; Oftedal et al., 2018; Guerrero and Marozau 2022).

It has been affirmed that a successful country's institutional framework has the ability to act as a catalyst for encouraging people to become entrepreneurs. Therefore, entrepreneurship literature focused recently on regional and national drivers and determinants of the entrepreneurial behavior (Komlosi et al., 2014). Contributing to the advancement of the entrepreneurial intent literature which argued that there is a limited understanding of the relationship between institutional environmental, individual motivational and contextual educational factors that can drive entrepreneurial intention among students in a single research model, these limits create a research gap that must be filled (Linan and Chen 2009, Mickiewicz et al., 2021, Bagis et al., 2023, Al Qadasi et al., 2023), and in the same vein, several studies suggest that studying one group of determinants in isolation from the others may yield misleading and inaccurate results Al Qadasi (2023). Therefore, in this study, we combined contextual, environmental, and personal variables into a single model and investigate their effect on entrepreneurial intention among Tunisian university students. According to the latest international reports, Tunisia ranks 4th out of 49 countries in terms of entrepreneurial intention. However, for the "Ease of Starting a Business" factor, it only ranks 30th, reflecting persistent administrative constraints. Moreover, many young Tunisians turn to entrepreneurship out of necessity — in response to high unemployment — rather than opportunity. This situation reinforces the importance of understanding how institutional pillars, entrepreneurial education, and individual motivations influence students' entrepreneurial intentions.

## Theoretical Approach

Since 2011, the Tunisian economy has been susceptible due to political instability, which has been exacerbated by the COVID-19 pandemic. The employability of higher education graduates has become a relevant challenge for Tunisian universities; it's considered as a key of reference in all universities' new reforms. Therefore, several efforts have been employed in promoting entrepreneurship education through the generalization of business creation trainings and entrepreneurial culture, as well as the establishment of entrepreneurship-focused MBAs. As a result, a continuous attempts are made to adapt new educational approaches, whether in entrepreneurship or other education fields.

Recently, the Tunisian Ministry of Higher Education officially launched in November 2019, the National Status of Student Entrepreneur (SNEE). This status is granted to student entrepreneurs who have an idea for a project or plan to create a business during their academic career or after graduation. This program is implemented in universities from the 2019-2020 academic year.

Referring to the GEM report in 2022, for the entrepreneurial intention index, Tunisia is ranked fourth out of forty-nine participating countries on a worldwide scale, for the "Ease of Starting a Business" factor, Tunisia is placed 30th out of 49 participating nations in terms of the effectiveness of government initiatives implemented to decrease bureaucracy and facilitate business development. However, according to the same report, Tunisians are forced into entrepreneurship due to external economic and social pressure such as employment scarcity, thus, we can consider define it as necessity entrepreneurship or involuntary entrepreneurship.

Actually, the employability of graduates is now a major challenge for Tunisian universities. In this context, several initiatives have been launched to strengthen the entrepreneurial culture, such as the expansion of business creation training and the establishment of entrepreneurship-oriented MBAs. Thus, the integration of entrepreneurial education as a key factor allows for a better understanding of its role in shaping the entrepreneurial intention of young people.

This has given rise to the notion that personality traits may influence entrepreneurial success, but not in isolation, and most likely through more proximal elements like as human/social capital and motivational factors (Lüthje and Franke, 2003), most of these research studies have empirically referred to the TPB for investigating students' entrepreneurial intention (Linan and Chen, 2009. Brunner and Schaeffer, 2024).

## Theory of planned behaviour

According to Ajzen's (1991) three main elements are consisting of the Theory of Planned Behaviour (TPB) and influence the behavioural intention: personal attitudes (PA), subjective norms (SN), and perceived behavioural control (PBC). Firstly, Personal Attitudes toward behaviour refers to the degree to which the individual evaluates an action to conduct positively or negatively. The second component "Subjective Norms" refers to the individual's beliefs of the social pressure of close persons (such as family, close friends, role models, mentors, or others) to execute specific action or activity. The third predictor which is Perceived Behavioural Control, refers to the perceived ease or difficulty of performing a behaviour or an action. Following in the footsteps of Ajzen - Fishbein (2004), the three listed variables are sufficient to convey the goals, but their relative relevance fluctuates depending on the circumstances. Recent research on entrepreneurial intention supports the need to extend the theory of planned behavior in order to incorporate antecedent factors (e.g, institutions, education, motivation) (Krueger *et al.*, 2000; Linan and Fayolle, 2014, Laouiti *et al.*, 2022, Bagis *et al.*, 2023) that explain the individual entrepreneurial intention level. Thus, in the framework of acting in the future, this study applies the theory of Planned Behaviour in order to understand the process of intention development, and ultimately identify the influence of the three main factors on intention formation.

### Personal Attitude towards the entrepreneurial behaviour

Attitudes are the key to understanding human behaviour, in the specific context of this study, attitudes refer to a positive or negative assessment of the idea of business creation. Entrepreneurial intention depends on attitudes toward the behaviours that one wants to achieve, thus, those that exhibit strong entrepreneurial mindsets are encouraged to create their business. It is conceptualized as the degree to which a person has a favourable appraisal of the behaviour, and attitude towards entrepreneurship behaviour refers to the difference between the concepts of a personal desire to become self-employed and the desire to work as an employee (Tarek Ben Ali, 2016; Boussoura *et al.*, 2025).

### Perceived Behavioural Control

It's related to the perception of the easiness or difficulty to develop a behaviour, it involves assessing the availability of the tools and opportunities needed to carry out a desired behaviour, as well as the environment's barriers and other supportive factors in the societal context. People will have strong intents for starting their own businesses if their environment encourages them, such as by providing access to financing, lowering barriers to entry and exit. As argued by Tarek Ben Ali (2016), it reflects to the perception of the easiness or difficulty in the fulfilment of the behaviour of interest.

### Subjective Norms

Subjective Norms refers to the social drivers created by the society; it describes how society affects a person's decision to start a business. It refers also to the perceived social pressure to perform the behavior. The opinion of significant persons (i.e., opinions of individuals' parents, friends, partners or other important role, etc.) about whether a person will choose to follow a career as an entrepreneur seems to affect the formation of entrepreneurial intention (Solesvik, 2013; Liñán and Chen, 2009). Despite the enormous importance that families play in Italian society, Arrighetti *et al.* (2016) found that the effect of family or friends in supporting students when establishing a new business is not significant. In fact, the family offers a motivating, demanding, and responsive environment during infancy, early childhood, adolescence, and young adulthood. Meanwhile entrepreneurial motivation and entrepreneurial education are two constructs in the intents theory that has not received enough attention in the literature (Fayolle- Linan, 2014).

### Entrepreneurial Motivation

According to Schacter *et al.* (2011), motivation is defined as the driving reason or purpose of acting, it's considered as the cause of acts' accomplishment. Engle *et al.* (2007) provided evidence in favor of the idea that entrepreneurial intention has significant antecedents in terms of needs for autonomy, wealth, and achievement motivation. Thus, entrepreneurial motivation was included to the TPB by Solesvik (2013), who also affirmed

that motivation is crucial to the success of entrepreneurial intention. Additionally, highly motivated individuals are more likely to launch creative products (Plotnikova et al., 2016), thus, students bring to the educational institutions an accumulation of motivations, intentions, and past experiences knowledge that influence the quality of the learning process; thus, entrepreneurial education should assist students with relevant knowledge and skills they need while also helping them developing self-confidence.

### Entrepreneurial education

Since it is crucial to fostering the mindset, expertise, and abilities connected with the practice of entrepreneurship, research has focused on the importance of entrepreneurship education in developing entrepreneurial spirits (Fayolle 2013, Gangi, 2017). Due to the fact that almost all public universities in Tunisia offer the course of entrepreneurial culture as a cross-disciplinary module, entrepreneurship has become an essential component of higher education programs (El Ghoul- Amrouni, 2017). Thus, Badri- Hachicha (2019) affirmed that a student's intention to form his own enterprise might be significantly influenced by the academic and practical knowledge he has learned in school and from other elements of civic society. Indeed, a young student with prior academic and professional expertise would undoubtedly have a greater probability of coming up with business ideas for commercial endeavours and business starting. In the context of entrepreneurial education, programme-derived entrepreneurial inspiration is defined as “a change of hearts (emotion) and minds (motivation) evoked by events or inputs from the programme and directed towards considering becoming an entrepreneur” (Souitaris et al., 2007, p.573).

In Tunisia, developing the entrepreneurial spirit among young people is a priority for politicians to fight unemployment, which mainly affects graduates, this is how programs have been developed in higher education to install an entrepreneurial culture and encourage future graduates to opt for a business plan. In addition, personal development courses have been introduced to build self-confidence and work more on the profile of a student entrepreneur. Entrepreneurship clubs were also created by the students' competitions were organized to reward the best business plan and the best entrepreneurial ideas. Besides, Tunisian higher education institutions offer support activities for start-ups, for example through a dense and well-developed network of business incubators located in universities and external entrepreneurship support structures (OECD, 2012). The quality of teaching in entrepreneurship and the university spin-off of companies is now considered as criteria for ranking the best universities (Bécharde - Grégories, 2005).

### Theory of institution

Institutional contexts vary from one nation to another (Paradeise- Thoenig, 2013), according to North (1990), institutions can be categorized as formal or informal (Harbi and Anderson, 2010; De Clercq *et al.*, 2013; Estrin *et al.*, 2013; Aparicio *et al.*, 2018). Scott (1995) divided institutions into three categories: the normative, the cognitive, and the regulatory dimensions (e.g., Busenitz *et al.*, 2000; Stenholm *et al.*, 2014; Korosteleva and Belitski, 2017). The institutional theory developed by numerous scholars is being used as a foundation for several disciplines, in sociology (Meyer and Rowan, 1977), political science (Spiller and Tommasi, 2003), and economics (North, 1990), it seeks to explain how external institutional regulations, or "rules of the game," influence human behavior (North, 1990; Engle *et al.*, 2007).

In order to better understand institutional context and explain why the entrepreneurial behavior and the entrepreneurship level differs and varies across nations Nakara *et al.* (2020), Busenitz *et al.* (2000) proposed an institutional framework as a more comprehensive approach to comprehending entrepreneurial behaviour, they measured the following three dimensions: regulative institution (laws, regulations, and public policies that support new businesses), cognitive institution (knowledge shared among those who want to start a business), and normative institution (level of admiration and value placed on entrepreneurs) Laouiti *et al.* (2022). In order to comprehend the intention-behaviour gap several prior studies have focused mainly on the role of individual-level characteristics such as self-efficacy (Boyd and Vozikis, 1994), demographics (Shirokova *et al.*, 2016), self-identity or emotions (Van Gelderen *et al.*, 2015).

## Regulatory Institution

According to Busenitz et al. (2000) and Bagis et al. (2023), the regulatory pillar of institutions investigates how individuals perceive the laws, regulations, and government policies that encourage some actions and prohibit others that are in a specific region. According to Scott (2014), regulatory procedures include the ability to create norms and rules which can modify the consequences as rewards or punishment in an effort to change future behaviours. It is consequently anticipated that regulatory institution that supports entrepreneurial activities will result in stronger student entrepreneurial intentions.

## Normative Institution

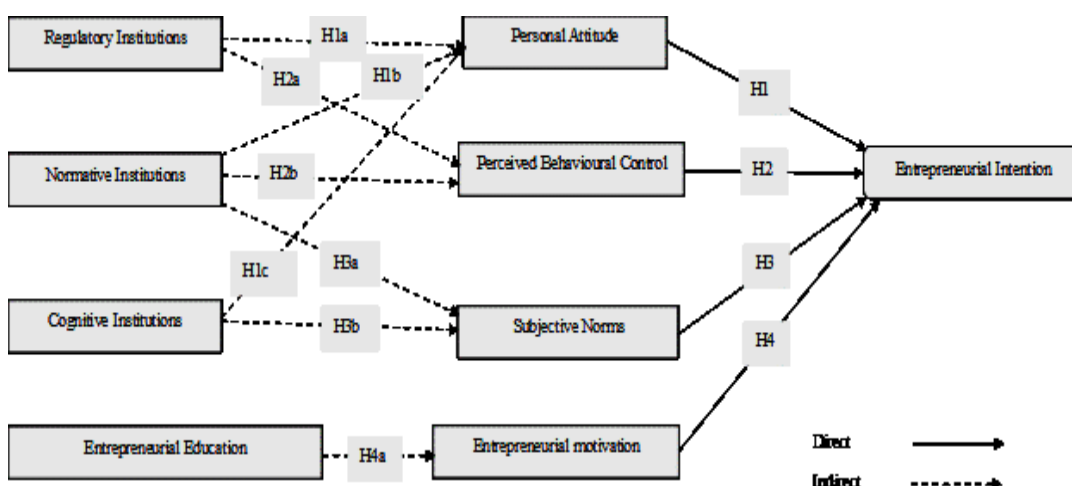
The normative component includes socially accepted and upheld societal standards, values, beliefs, and assumptions about human nature and behavior (Kostova and Marano 2019). Hofstede's classification of nations according to the level of individualism in their cultures is contrasted with the normative dimension (Busenitz *et al.*, 2000). Several studies demonstrates that the entrepreneur's environment somewhat influence the act of starting a business, having the desire to do something or being able to do it depends on more than just your own unique, isolated personal characteristics. The literature review notes that the perceived viability of business creation is frequently linked to the circumstance, environmental and situational factors, it can either encourage or inhibit the entrepreneurial process at various stages (Tounes, 2003).

## Cognitive Institution

The cognitive component reflects the shared social and cognitive understanding of the citizens of a certain nation. Because they greatly influence the cognitive programs, such as schemas, frames, and inferential sets, that people employ when choosing and interpreting information, cognitive structures have an impact on individual behavior. According to Bird (1992), the act of starting a business is a direct result of people's goals, which are undoubtedly influenced by environmental factors. The goal is, undoubtedly, first and foremost a personal desire, but it also depends on contextual factors (Vesalainen and Pihkala, 1999). In order to address this inquiry, some researchers (Hisrich and O'Kinneide, 1986; Fillion, 1991; Casson, 1991) have demonstrated the impact of the sociocultural environment, the family context, the professional environment, and the personal network on the emergence and success of the entrepreneurial project. In line with this viewpoint, Shapero - Sokol (1982) exposed group belonging characteristics, prior experiences, learnings, and even imitation pictures as catalysts of the decision-making process leading to the creation of an enterprise. In fact, this approach has aided studies on the impact of the value system on entrepreneurial behavior conducted by researchers from other fields (anthropologists, psychologists, and sociologists). For Gartner (1989), the choice to launch a new business is a personal decision-making process that involves a cost-benefit analysis of the opportunities, this decision is generally seen as the act that triggers the entrepreneurial process, or the point at which a creator becomes a new entrepreneur.

## Theoretical framework and Hypotheses

Figure 1- Theoretical Framework



H1: PA is positively related to the EI.

H1a: PA mediates the relation between RI and EI.

H1b: PA mediates the relation between NI and EI.

H1c: PA mediates the relation between CI and EI.

H2: PBC is positively related to the EI.

H2a: PBC mediates the relation between RI and EI.

H2b: PBC mediates the relation between NI and EI.

H3: SN is positively related to the EI.

H3a: SN mediates the relation between NI and EI.

H3b: SN mediates the relation between CI and EI.

H4: EM is positively related to the EI.

H4a: EM mediates the relation between EE and EI.

H5: RI is positively related to EI.

H6: NI is positively related to EI.

H7: CI is positively related to EI.

## Research And Measurement Design

The Shapero and Sokol's (1982) and Ajzen's (1991) theories of planned behaviour (TPB) have been widely used to the study of entrepreneurial intention. Generally, the TPB model is the dominant model it has been used in a greater number of works across different disciplines (Fayolle and Linán, 2014; Borsi-Dory 2019), through the entrepreneurship publications, intention models are related to different models and theories, such as motivation theory, and the theory of institution (Bagis *et al.*, 2023). Thus, scholars in this field have highlighted the importance of using cognitive approach, in addition to behavioural theories, to increase knowledge of the antecedents of entrepreneurial intention.

Conducting face-to-face data collection was considered as the best method for this study investigation. Thus, a survey was developed to obtain the responses from 367 students enrolled at Tunisian universities. To measure the students' entrepreneurial intention, we suggested the use of items related to attitude towards becoming an entrepreneur, perceived behavioural control, subjective norms, and Entrepreneurial Intention that were designed and tested by Liñán and Chen (2009), we adopted the measurement of the Entrepreneurial education from the tested questionnaire of (Franke-Lüthje 2004), for the Entrepreneurial motivations we adopted items from (Solevik, 2013). To measure the Institutional support, we suggested the use of the questionnaire developed by Busenitz et al. (2000), Dehghanpour Farashah (2015).

## RESULTS AND DISCUSSION

### Validity: (Validity and Reliability)

To assess measurement model, we must verify the convergent and discriminant validity of each construct in my model. The testing of three indices is required for convergent validity: factor loadings, average variance extracted

(AVE), and composite reliability (CR). As demonstrated in Table, good convergent validity was achieved because all item loadings on each relevant construct above the 0.60 criterion indicated by Hair et al. (2010).

Table 1- Results of Convergent Validity

Variables	Cronbach's alpha	Composite reliability (CR)	Average variance extracted (AVE)
CI	0,821	0,822	0,737
EE	0,858	0,864	0,778
EI	0,940	0,944	0,773
EM	0,844	0,884	0,614
NI	0,866	0,874	0,716
PA	0,926	0,932	0,773
PBC	0,834	0,834	0,750
RI	0,889	0,896	0,750
SN	0,804	0,814	0,719

To assess the discriminant validity, two criteria can be used: cross loadings of the indicators and the Fornell-larcker criterion. AVE should be greater than the variance shared between the construct and the other constructs in the model (i.e., the squared correlation between two constructs). For adequate discriminant validity, the diagonal elements should be significantly greater than the off-diagonal elements in the corresponding rows and columns. This condition is satisfied for each reflective construct.

Table 2-Results of Fornell-Larcker Criterion analysis

	CI	EE	EI	EM	NI	PA	PBC	RI	SN
CI	0,858								
EE	0,422	0,882							
EI	0,485	0,244	0,879						
EM	0,350	0,307	0,211	0,784					
NI	0,381	0,342	0,394	0,291	0,846				
PA	0,451	0,230	0,827	0,119	0,379	0,879			
PBC	0,793	0,368	0,558	0,313	0,394	0,540	0,866		
RI	0,423	0,911	0,247	0,326	0,359	0,264	0,379	0,866	
SN	0,318	0,279	0,425	0,286	0,628	0,406	0,376	0,275	0,848

## Structural Relationship analysis

### direct relationship analysis

To assess the structural model with Smart PLS, different criteria are required to analyze such as the coefficient of determination ( $R^2$ ), the effect size ( $f^2$ ) and the path coefficients (Hair et al., 2019; Henseler et al., 2012). As suggested by Hair et al. (2019) an  $R^2$  value of 0–1 suggests a good level of predictive accuracy, with a higher  $R^2$  value indicating a higher level of predictive accuracy. In this case the coefficient of determination of students' entrepreneurial intention presents a high degree of predictive accuracy ( $R^2 = 0.711$ ); which indicates that this endogenous latent construct is explained by up to 71.1%. Additionally, the values of the effect size ( $f^2$ ) for normative and regulatory institutions, which are 0.503 and 1.197 indicate the large effect of these two exogenous variables. The  $f^2$  values for cognitive institutions and entrepreneurial education which are 0.123 and 0.104 respectively are acceptable.

### Mediation relationship analysis

The indirect (mediation) results revealed that H5, H6, H7 and H8 were accepted and statistically significant.

Table 3- PLS mediation test with bootstrapping

	Indirect effect ( $\beta$ )	Standard error (SE)	Lower bound (95%)	Upper bound (95%)
CI->EI	0,259	0,041	0,181	0,339
EE->EI	0,021	0,011	0,002	0,044
NI->EI	0,244	0,052	0,143	0,344
RI->EI	0,273	0,058	0,158	0,383

Table 4- Path coefficient of the research hypotheses

Hypothesis	Relationship	Std. Beta	Std. error	T value	P value	Decision
H1	PA->EI	0.729	0.039	18.580	0.000	Supported**
H2	PBC->EI	0.119	0.033	2.917	0.004	Supported**
H3	SN->EI	0.065	0.041	1.984	0.047	Supported *
H4	EM->EI	0.068	0.032	2.143	0.000	Supported**
H5	RI->EI	0,056	0,040	1,393	0,164	Rejected
H6	NI->EI	0,244	0,052	4,730	0,000	Supported **
H7	CI->EI	0,259	0,041	6,388	0,000	Supported**
H8	EE->EI	0,021	0,011	2,002	0,045	Supported *
H1a	RI->PA->EI	0,024	0,037	0,651	0,515	Rejected
H1b	NI->PA->EI	0,171	0,048	3,549	0,000	Supported**
H1c	CI->PA->EI	0,253	0,041	6,223	0,000	Supported**



H2a	RI->PBC->EI	0,032	0,013	2,528	0,011	Supported**
H2b	NI->PBC->EI	0,035	0,015	2,352	0,019	Supported**
H3a	NI->SN->EI	0,039	0,020	1,926	0,054	Rejected
H3b	CI->SN->EI	0,006	0,004	1,477	0,140	Rejected
H4a	EE->EM->EI	0,021	0,011	2,002	0,045	Supported *
Significant at P**=<0.01, P*<0.05						

The first hypothesis predicts that personal attitudes have a direct positive and significant effect on entrepreneurial intention was accepted (H1.  $\beta = 0.729$ ;  $t$ -value = 18.580;  $p = .000$ ). Hypotheses 2,3 and 4 were also accepted which predict respectively that perceived behavior control (H7,  $\beta = 0.119$ ;  $t$ -value = 2.917;  $p = .004$ ), subjective norms (H6,  $\beta = 0.065$ ;  $t$ -value = 1.984;  $p = 0.047$ ), and entrepreneurial motivation ( $\beta = 0.068$ ;  $t$ -value = 2.143;  $p = .000$ ) have a significant positive effect on entrepreneurial intention. Consistent with the literature and past research in the field of entrepreneurship and other research domains, these empirical findings support the TPB in demonstrating that personal attitude, perceived behavioural control and subjective norms, are major predictors of entrepreneurial intention. Thus, we replied to the prior call for study into the antecedents of EI at the contextual level (Fayolle and Liñán, 2014). Furthermore, the results argued the important influence of family, friends, abilities to control, beliefs on self-abilities, and the self-motivation on the intention towards business creation and student's entrepreneurial intention. (Solevik, 2013).

The fifth hypothesis states that there are a direct positive and significant effect of RI on students' entrepreneurial intentions. The finding allowed this hypothesis to be rejected (H5.  $\beta = 0,056$ ;  $t$ -value = 1,393;  $p = .0164$ ). Our findings may relay with Charfeddine and Zaouali (2022) findings which indicate that regulatory institutions have a greater impact on the behaviors of owners of incumbent enterprises than on the intents of early-stage entrepreneurs.

The hypothesis number 6 proposes that there is a positive relationship between normative institutions and students' entrepreneurial intentions. The results allowed this hypothesis to be accepted (H6.  $\beta = 0.244$ ;  $t$ -value = 4.730;  $p = 0.000$ ). Respectively hypothesis number 7 states that cognitive institutions have a significant effect on students' entrepreneurial intention, H7 is statistically significant (H7.  $\beta = 0.259$ ;  $t$ -value = 6.338;  $p = 0.000$ ). These empirical results allowed me to accept these hypotheses. These results come as a confirmation to the findings of previous studies which argued the significant and positive relationship between normative, cognitive institutions and entrepreneurial intentions (Valdez and Richardson 2013; Oftedal et al. 2018; Laouiti et al., 2022, Bagis et al., 2023,).

The last direct relationship is represented by the hypothesis number 8, which predicts that entrepreneurial education has a direct positive and significant effect on students' entrepreneurial intentions, was accepted. The relationship between these two variables is positive and significant (H8.  $\beta = 0.021$ ;  $t$ -value = 2.002;  $p = 0.045$ ). my result is similar to the findings of (Nguyen and Nguyen, 2023) which indicate that entrepreneurial education in the Vietnamese context have a favorable impact on entrepreneurial intention.

Although, one of the three institutional pillars was found insignificant on its direct relationship with entrepreneurial intention, we examined the mediating impact of individual motives (PA, SN, PBC, and EE) on entrepreneurial intention. This study supported H1b, H1c, H2a, H2b, H3a, H3b, and H4a, thus, we suggested that individual motives mediate the impact of the institutional pillars (regulative, normative, cognitive) and the entrepreneurial education elements on entrepreneurial intentions.

The relationship between CI and EI, NI and EI were significantly mediated by PA. Similarly, the relationship between NI and EI and between RI and EI were significantly mediated by PBC. Moreover, the relationship between EE and EI was significantly mediated by EM. Indeed, the test of mediation (see Table) with the bootstrap resampling procedure confirms that CI, EE, NI and RI are indirectly related to EI and is fully mediated

by PA, PBC and EM (Hypothesis 7, 8, 6, 14, 15, 16) ( $\beta = 0.259$ ;  $\beta = 0.021$ ;  $\beta = 0.244$ ;  $\beta = 0.056$  are significant because zero is not included in the confidence interval ([0.181–0.339]; [0.002–0.44]; [0.143–0.344])). For hypothesis H1a, the mediating effect of PA between RI and EI was not significant (H1a,  $\beta=0.024$ ,  $t$ -value=0.651,  $p$ -value= 0.515). Similarly, the mediating effect of SN between NI and EI (H3a,  $\beta=0.039$ ,  $t$ -value=1.926,  $p$ -value= 0.054) and CI and EI (H3b,  $\beta=0.006$ ,  $t$ -value=1.477,  $p$ -value= 0.140) were not significant.

These findings align with discussions by (Bagis et al., 2023), Schlaegel et al. (2013), Schlaegel and Koenig (2014), Urban and Kujinga (2017), and Oftedal et al. (2018). These findings also add to the literature and show that, to understand the institutional impact, it is crucial to integrate individual-level variables to know the extent to which institutions influence entrepreneurship and the mediating role of individual variables in this relationship.

The mediating impact of individual motives on institutional pillars and entrepreneurial intention could be explained by the uncertainty facts of conducting business in the Tunisian context similarly to the Turkey and Kosovo (Bagis et al., 2023).

Moreover, I can add my findings for the mediation effect of entrepreneurial motivation between entrepreneurial education and entrepreneurial intention to the findings of (Solevik, 2013) which confirmed this relationship and argued that entrepreneurial educational programs stimulate student's entrepreneurial motivation towards business creation, thus educational channels, proving their relevant role on motivating students' creativity and innovation towards the business world.

## CONCLUSION

One suggestion to resolving the financial issues, especially in emerging countries, is to launch a business. Across all societies, institutions are both the creators and executors of the rules of the economic life norms (DiMaggio and Powell, 1991).

Therefore, this study adds to the body of entrepreneurship literature in two ways: first, by confirming the strong findings that public support is among the best indicators of entrepreneurial intention (EI); we confirmed that in the Tunisian society, entrepreneurship is a socially supported behaviour and is regarded as an appropriate career option.

Second, we provided a framework for future research to address the paradoxical findings, according to Shirokova et al. (2020), similar organizations and resources for entrepreneurship may yield different outcomes under different circumstances, which contradicts our findings. In certain situations, university support for entrepreneurship may have a negative impact on students' intentions to start their own businesses (Morris et al., 2017). Shirokova et al. (2022) argued that encouraging entrepreneurship excessively may have the opposite effect of a "too-much-of-a-good-thing."

Thus, in order to meet the demands of students and provide them with a variety of market entrance resources, including social and financial assistance, we advise Tunisian policy makers to re-adapt entrepreneurship-related educational programs and market laws and regulations (Vinogradova et al., 2022).

As all studies, this study has its limitation, firstly it has only employed quantitative data using a survey questionnaire, however future studies might collect both quantitative and qualitative data for a more comprehensive analysis. Second, particularly in conservative nations such as Tunisia, it might be needed to include gender comparison research on the influence of institutional support on entrepreneurial intention.

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