

Analyzing the impact of psychological capital on the entrepreneurial intentions of students through mediating role of individual expectancy using PLS-SEM

Anoop Kumar

Amity Business School, Amity University, Gwalior, India

Pankaj Singh

School of Business, Galgotias University, Greater Noida, India

Anil Singh Parihar

CDOE, Manipal University, Jaipur, India, and

Sanjeev Saraswat

Institute of Business Management, GLA University, Mathura, India

Abstract

Purpose – The main impetus of the present analysis is to inspect the effect of psychological capital (PsyCap) on entrepreneurial intentions (EI) amongst college students and to test the mediation role of individual expectancy between PsyCap and EI.

Design/methodology/approach – The cross-sectional data of the university students enrolled in business management and engineering courses served as the foundation for the quantitative study design. To test the formulated hypothesis, PLS-SEM is utilized for analyzing the structural relationships between dependent and independent variables.

Findings – The results indicate that PsyCap significantly impacts the EI of collegiate students pursuing engineering and management courses. However, individual expectancy plays a partial mediating role between the PsyCap and EI of college students.

Research limitations/implications – This research provides an assessment of the effect of PsyCap on the EI of college students with the partial mediating effect of individual expectancy. The findings deliver the enhancement of the EI literature.

Practical implications – The study outcomes are helpful to educators, university administrators, curriculum developers and entrepreneurial policy planners to realize the role of individual expectancies of students' entrepreneurs on their EI.

Social implications – The student entrepreneur community recognizes that individual students with stronger levels of entrepreneurial PsyCap having further probability tend to become future entrepreneurs.

Originality/value – The present analysis is original and holds novelty in the form of the mediating role of individual expectancies between PsyCap and EI of students.

Keywords Entrepreneurs, Education, Entrepreneurship, Entrepreneurial intention, PLS SEM

Paper type Research paper

1. Introduction

Entrepreneurship has become one of the basic impulsive forces for any nation in achieving strong job opportunities, high employment, positive social change and economic growth while supporting the home economy (Wiklund *et al.*, 2019). Entrepreneurship is the procedure of creating, establishing and managing a newly established enterprise, such as a start-up that provides a process, good or service (Drnovsek *et al.*, 2010). The entrepreneurial function is described as the entrepreneur's capacity and willingness to design, manage and administer an enterprise endeavor,

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comprising all related risks to turn a revenue (Ebner, 2005). The engines of economic growth in developing countries like India are enterprise creation and entrepreneurship development.

EI is the most explored area and various scholars have studied this with numerous other factors and established their findings (Maheshwari *et al.*, 2022). While PsyCap has been considered as a vital factor of entrepreneurship and hence the study of the relationship between these two constructs is emerging (Baluku *et al.*, 2016). The primary precursor to entrepreneurship is EI as an expected outcome of intentional behavior (Zhang *et al.*, 2015). EI is the entrepreneur's inherent perception and behavior inclination to build a novel enterprise. In this regard, university students' EI can be viewed as a progressive process influenced by demographic factors, personality traits, environmental factors and situational factors (Swarupa and Goyal, 2020).

PsyCap is a person's affirmative psychological capacities which are the combination of psychological resources (Nolzen, 2018). The presence of efficacy, hope, optimism and resilience is referred to as four elements of PsyCap commonly known as the "HERO" approach that supports a person's overall psychological health and are important for many facets of life, including the purpose to initiate an enterprise (Luthans *et al.*, 2015). Entrepreneurs with advanced intensities of PsyCap are more capable to cope the expenditures of faults than persons with lesser levels, acquire from errors and efficiently manage and control enterprise (Baron *et al.*, 2016). So, higher levels of PsyCap have been linked to an increased likelihood of EI and positive psychological resources help foster an attitude that is favorable to entrepreneurship (Ephrem *et al.*, 2019). Various studies reported that PsyCap significantly impacts the EI of university students (Salavou *et al.*, 2023). Subsequently, several scholars concluded that EI are positively impacted by positive PsyCap (Maslakci *et al.*, 2021). Therefore, the present analysis object is to explore the effect of PsyCap on the EI of university students based on expectancy theory. The expectancy theory was introduced by Vroom (1964) and it consists of three elements of motivation forces as expressed in the following equation:

$$\text{Motivation Forces (MF)} = \text{Valence (V)} \times \text{Instrumentality (I)} \times \text{Expectancy (E)}$$

As per expectancy theory, there is always an instrument and valence behind each and every expectation of an individual. In this regard, IE are the major source of motivation for EI. Expectations are an individual's convictions about the possible results of their actions and their level of assurance in their capacity to complete a specific task (McGee *et al.*, 2009). An IE are vital for predicting and stimulating EI. According to the expectancy theory, individuals only act (like initiating a novel business) when they have faith in that they are sufficiently proficient and interested to do so like in beginning a novel business (Gatewood *et al.*, 2002). Thus as per expectancy theory, entrepreneurs are more likely to be driven to start and continue their businesses if they have high self-efficacy, positive outcome expectancies and a strong belief in their ability to overcome the obstacles that come with being an entrepreneur (Renko *et al.*, 2012). The motivating expectancy factor is essential for forming an entrepreneurial mindset and inspiring people to follow through on their goals. According to earlier research, the process of launching a new company is based on the effort-performance-outcome model of entrepreneurial expectancies (Manolova *et al.*, 2012). To put it another way, expectancy, instrumentality and valence are the three factors that determine an entrepreneurial motivation. Therefore, the following questions arise:

RQ1. Does PsyCap affect the EI of university students?

RQ2. Are EI of college students affected by their IE?

RQ3. Does IE mediate between the PsyCap and EI of college students?

In the relevant literature, merely a few studies focused their attention on analyzing the effect of PsyCap on the EI of students. Thus, there appears the foremost opportunity to validate the

hypothesized measurement model to recognize the effect of PsyCap on EI amongst university students. In such a state, a study on linking PsyCap and IE to EI becomes vital for efficient entrepreneurial policy formulation.

1.1 Study objectives

Three research inquiries that have been found unanswered in the existing literature about the effect of PsyCap on EI among university students. How PsyCap does affects the EI of college students? How are EI of college students affected by their IE? How do IE mediate between the PsyCap and EI of college students? Based on the above research inquiries, the objectives addressed in this study are as follows:

- (1) To analyze the effect of PsyCap on the EI of university students.
- (2) To empirically assess the relationship amongst variables in the hypothesized measurement model.
- (3) To analyze the structural relationship between PsyCap, IE and EI.

The structure of the present analysis is classified into five sections. The initial section discussed the overview of the study. The second section discusses the review of literature and formulation of hypotheses. Section third elaborates the adopted methodology. Section four explains the data analysis part. The section fifth provides findings and discussion and the last section delivers the conclusion, limitations and implications part.

2. Literature review and hypothesis design

The review of relevant studies based on existing literature is an extensive part of the recognition of study gaps (Kushwaha *et al.*, 2023a).

2.1 PsyCap and entrepreneurial intention

In order to achieve success as an entrepreneur, EI is a mental state that directly focuses on the entrepreneurs' goals (Ferreira *et al.*, 2012; Ozcelik, 2019). EI is often used interchangeably with the word entrepreneurship (Neves and Brito, 2020). EI is a tool that is used to analyze the intensity of entrepreneurship activity (Kong *et al.*, 2020). EI aids in the creation of new jobs, boosts innovation and makes the labor market more competitive, entrepreneurs have been seen as a vital provider and a fiscal engine of all nations (Barba-Sánchez *et al.*, 2022). Popescu *et al.* (2016) argued that EI is the beginning of the establishment of a trade. Krueger *et al.* (2000) argued that EI is a particular attitude and expectancy of prospective entrepreneurs regarding their willingness to involve in entrepreneurial events. Thompson (2009) explored that EI refers to the idea that business owners anticipate to launch a venture.

The PsyCap of an individual is likely to influence their motivation and overall outlook toward work (Luthans and Youssef, 2007). PsyCap is a person's constructive mental state of growth that is described by: (1) having the self-confidence (efficacy) to make the required determination to prosper at inspiring jobs; (2) having an affirmative outlook (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) and (4) being resilient to the point of bouncing back (resilience) from setbacks and adversity to achieve success (Da *et al.*, 2021). For a business venture to be successful, an entrepreneurs' PsyCap is crucial (Baluku *et al.*, 2016). Maslakçi *et al.* (2021) concluded that PsyCap significantly impacts the EI of university students in Cyprus. Chevalier *et al.* (2022) conducted a study among French students and concluded that students with extraordinary PsyCap-based skills and knowledge are more likely to possess high EI. Salavou *et al.* (2023) argued that high PsyCap among students leads to high EI. Thus, it is hypothesized as:

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- H1. There subsists a positive relationship between hope and the EI of college students.
- H2. There subsists a positive relationship between self-efficacy and EI of college students.
- H3. There subsists a positive relationship between resilience and EI of college students.
- H4. There subsists a positive relationship between optimism and EI of college students.

2.2 Expectancy and entrepreneurial intention

The expectation that increased effort will result in improved performance is known as motivation (Erez and Isen, 2002). The expectation that one will obtain a particular outcome from one's effort is known as instrumentality. The degree to which an individual values the outcome is known as valence (Galbraith and Cummings, 1967). In the field of entrepreneurship research, motivation theories focus on the cognitive process-based decision-making that focuses on the individual's motivations for starting a business (Shane et al., 2003). Expectancy theory has made an effort to provide a general explanation for a person's performance at workplace (Chiang and Jang, 2008). According to expectancy theory, an individual's behavior is resolute by their sensible decision to maximize satisfaction and minimize adversity (Vroom, 1964). Subsequently, it can assumed that an individual will behave in a particular way because such behavior will lead to the desired result (Kushwaha et al., 2023b).

Hsu et al. (2014) observed that college students taking a preliminary entrepreneurship course as part of their research and discovered that according to expectation theory, a person will be more inclined to put in the work required to launch a business if they think that owning a business will enable them to achieve their desired goals with a significant effort input. Although expectancy theory has been applied practically in the domain of entrepreneurship by numerous studies (Gatewood et al., 2002). Renko et al. (2012) confirm the fundamental hypotheses of expectancy theory in various real-world contexts in the entrepreneurship field. Locke and Baum (2007) conceptualized a model for comprehending how and why people decide to become entrepreneurs based on the framework of the expectancy theory. Thus, expectancy, instrumentality and valence are three variables of the expectancy theory that were tested and found affirmative for motivational enhancement towards EI of the individual. Previous findings claimed that conventional intention frameworks are very close to expectancy theory and past studies tried to connect the entrepreneurial behavioral outcomes with expectancy theory (Renko et al., 2012). Therefore, it seems that expectancy theory should be integrated with the EI domain. Thus, we assume that:

- H5. There exists a positive relationship between hope and IE of college students.
- H6. There exists a positive relationship between self-efficacy and IE of college students.
- H7. There exists a positive relationship between resilience and IE of college students.
- H8. There exists a positive relationship between optimism and IE of college students.
- H9. There exists a positive relationship between individual expectancy and entrepreneurial intentions of college students.

2.3 Mediation role of expectancy

The EI has been shown to be the best predictor of an individual's planned behavior, specifically when the behavior is uncommon and difficult to detect for an unpredictable amount of time (Ajzen, 1991). Maresch et al. (2016) concluded that an individual is more probable to involve

in an entrepreneurial behavior the stronger their intention to do so. Further, university students' EI can be viewed as a progressive process influenced by demographic factors, personality traits, environmental factors and situational factors (Estelami, 2020). Ozelik (2019) studied and argued that the PsyCap of an individual instrument has a substantial effect on students' motivation.

Gatewood *et al.* (2002) argued that the entrepreneurial expectancies towards future business start-ups are majorly rely on the positive feedback of future entrepreneurs about their entrepreneurial abilities. Montano and Romero (2023) concluded that the expectations of an individual entrepreneur are positively influenced by entrepreneurial training programs as per the expectancy theory. Subsequently, instrumentality, a key element of expectation theory, describes how entrepreneurs credited the entrepreneurial training program for their enhanced entrepreneurial performance. Another element of expectancy theory is valence, which clarifies how entrepreneurs view values as the impetus for their improved output and performance. The direct effect of IE on EI has been explored in a few studies (Hsu *et al.*, 2014; Adamu and Shakur, 2018) but its mediation effect between PsyCap and EI is not yet established. Therefore, it is assumed:

H10. IE act as a mediator between hope and EI of college students.

H11. IE act as a mediator between self-efficacy and EI of college students.

H12. IE act as a mediator between resilience and EI of college students.

H13. IE act as a mediator between optimism and EI of college students.

Based on the formulated hypotheses, the conceptual model for the analysis is framed as depicted in Figure 1. This model is based on the mediation effect path diagram for general analytic consideration as proposed by Baron and Kenny (1986). The exploratory investigation has been conducted after descriptive research to explore the relationship between variables used in theoretical models.

3. Methodology

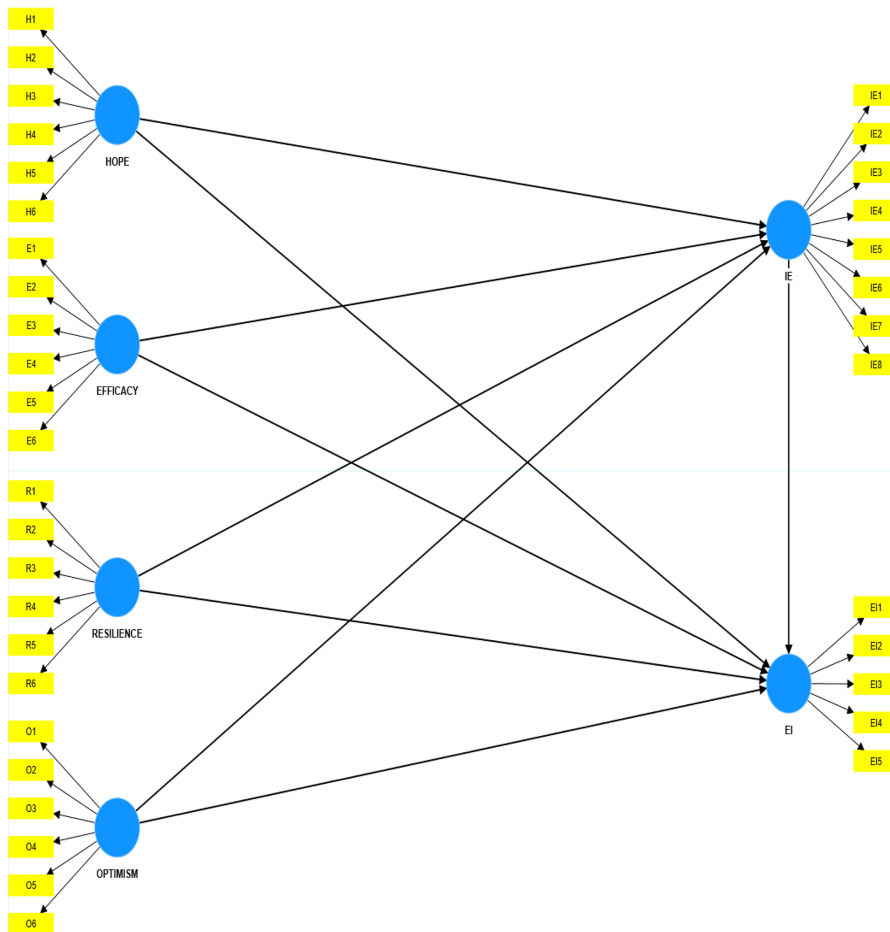
The methodological portion of the study is covered in this section, which also describes the tools that were used to achieve the study's goals (Singh *et al.*, 2021b). The research design of this survey study is exploratory and cross-sectional in nature. The current study used a 5-point Likert scale (1–5) where 1 implies strongly disagree and 5 indicates strongly agree to measure all theoretical constructs.

3.1 Questionnaire formulation

To test the formulated hypotheses a structured questionnaire consisting of 37 questions was framed. The first 24 questions consist of PsyCap determinants based on hope, self-efficacy, resilience and optimism queries. These questions are adapted to measure the PsyCap of students based on the PsyCap questionnaire developed by Seborá and Tantiukoskula (2011). The next 8 questions include the instrumentality, valence and expectancy components of the expectancy theory as developed by Holland and Garrett (2015). Further, the last 5 questions are deployed to assess the EI of college students based on EI questionnaire proposed by Linan and Chen (2006).

3.2 Sample size

The G-power tool is chosen for this study as it is freely accessible, user-friendly and effective software for the computation of sample size and statistical power estimation (Kang, 2021). Considering the variables of the study as shown in Figure 2, the G-Power suggested a



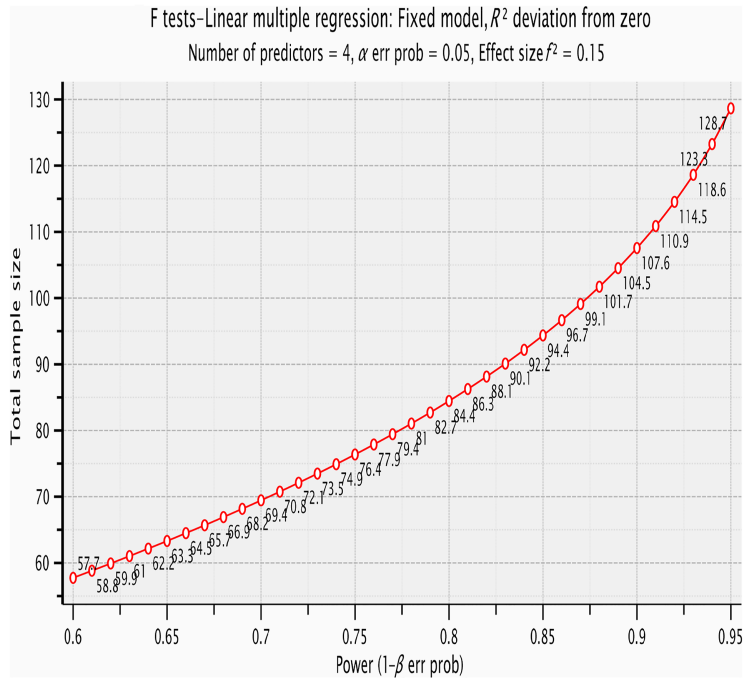
Source(s): Authors' own work

Figure 1. Conceptual model

benchmark sample size needs to be greater than or equal to 128 respondents. The universe of the study is the 2800 students pursuing business management and engineering courses from different universities in the Gwalior city of India. The students pursuing management and engineering are chosen as there are higher chances that these students turn up to be entrepreneurs. Thus, it is crucial to continuously examine and hone the entrepreneurial profile of such students (Herman, 2019). The students pursuing engineering and management were selected because it is observed that these students have a strong entrepreneurial orientation to become future business leaders.

3.3 Data collection

The non-random-based purposive sampling techniques have been adopted to collect the data from respondents through the survey questionnaire. Purposive sampling was used because it only included students purposely who had the desired expectancy and EI for future start-ups. In Gwalior City, in the central province of India, 300 questionnaires were given to management



Source(s): Authors' own work

Figure 2. Sample size calculation

and engineering students from six different universities (i.e. MITS Deemed-to-be University, Jiwaji University, Amity University, ITM University, Vikrant University and RVS Agriculture University). To ensure the equal participation of respondents from the selected six universities, 50 respondents were selected from a single university, consisting of 25 students each from management and engineering courses. In this regard, only those students chosen who have desired expectancy and EI for being future entrepreneurs. Finally, out of 300 surveys given to respondents, only 274 responses were found correct and after deep scanning 26 were rejected due to incomplete and incorrect responses. Subsequently, the 274 sample size finally considered for further analysis.

A structured questionnaire was utilized by incorporating validated scales from prior research to measure desired expectancy and EI of students for potential start-ups. It allows to gather valuable insights into their motivations, entrepreneurial ambitions and foundational understanding of broader entrepreneurial landscape within which they operate. For desired expectancy, we adapted expectancy-related constructs from expectancy theory of motivation (Holland and Garrett, 2015). Respondents rated their agreement with items assessing their belief in achieving outcomes like financial success, satisfaction and societal impact through entrepreneurial efforts. For EI, we employed established scales which captures respondents' commitment, readiness and planned efforts to start a business (Linan and Chen (2006).

3.4 Variables of study

The PsyCap and IE here are taken as an independent variable and their impact is studied on EI which is the dependent variable. PsyCap is analyzed based on the "HERO" approach and thus has sub-constructs as Hope, Efficacy, Resilience and Optimism (Luthans and Youssef, 2007). The mediating role of IE is considered for the study of PsyCap and EI.

4. Data analysis

The PLS-SEM version 4.0.9.6 is used for the data analysis which empirically analyses the data through two models, one as a measurement model and the other as a structural model.

4.1 Measurement model

The measurement model is used to check the reliability, convergent validity and discriminant validity. It describes the relationship between the constructs' indicators themselves. Cronbach's Alpha ($\alpha > 0.70$) and composite reliability CR (0.70–0.90) were used to measure the reliability (Hair *et al.*, 2019). The values of the Cronbach alpha and composite reliability of each variable are mentioned as Hope ($\alpha = 0.829$, CR = 0.833), Self-efficacy ($\alpha = 0.808$, CR = 0.810), Resilience ($\alpha = 0.838$, CR = 0.844), Optimism ($\alpha = 0.827$, CR = 0.833), IE ($\alpha = 0.875$, CR = 0.876) and EI ($\alpha = 0.842$, CR = 0.846) advocates the reliability of determine constructs. The factor loading of each item is > 0.60 and the AVE for all the variables is > 0.50 which indicates the validity of the constructs mentioned in Table 1.

Table 1. Reliability and convergent validity

Constructs	Items	Factor loading	Cronbach alpha	CR	AVE
Hope	H1	0.762	0.829	0.833	0.540
	H2	0.729			
	H3	0.745			
	H4	0.730			
	H5	0.753			
	H6	0.686			
Efficacy	E1	0.658	0.808	0.810	0.511
	E2	0.779			
	E3	0.692			
	E4	0.710			
	E5	0.756			
	E6	0.686			
Resilience	R1	0.682	0.838	0.844	0.552
	R2	0.738			
	R3	0.785			
	R4	0.745			
	R5	0.736			
	R6	0.767			
Optimism	O1	0.728	0.827	0.833	0.535
	O2	0.743			
	O3	0.799			
	O4	0.741			
	O5	0.666			
	O6	0.707			
Individual Expectancy	IE1	0.696	0.875	0.876	0.534
	IE2	0.781			
	IE3	0.740			
	IE4	0.683			
	IE5	0.729			
	IE6	0.740			
	IE7	0.751			
	IE8	0.722			
Entrepreneurial Intentions	EI1	0.757	0.842	0.846	0.613
	EI2	0.778			
	EI3	0.781			
	EI4	0.857			
	EI5	0.737			

Source(s): Authors' own work

The Heterotrait-Monotrait ratio (HTMT) is regarded to be a significant measure for testing the discriminant validity. It is the mean value of item correlations across constructs in relation to the (geometric) mean of average correlations for the items measuring the same construct. Thus, the values must be under 0.90 as a higher value than this means problem relies with data (Henseler *et al.*, 2015). The results mentioned in Table 2 reveals that the values for all the constructs in HTMT ratio are <0.90, indicates the acceptance of discriminant validity.

The collinearity of the formative indicators is evaluated through the variance inflation factor (VIF) and the ideal value for VIF must be less than 3, as higher values indicate critical collinearity issues among the indicators of formatively measured constructs (Becker *et al.*, 2015). The results of collinearity (i.e. VIF) among each constructs are less than 3 indicating the collinearity statistics acceptance (Table 3).

5. Findings and discussion

5.1 Structural model

The structural model is used to analyze the path coefficients through p -value ($p < 0.050$) and the correlation between variables to test the hypothesis, and determine its validity (Hair *et al.*, 2019). The testing of the hypotheses or relation among the constructs can be done through the direct effect and indirect effect which signifies the direct relationship and partial mediation effect respectively. The formulated all-direct hypothesis is supported since Table 4 shows that the p values of the path coefficients (hypotheses H1 to H9) are less than 0.050.

The specific indirect effect indicates the partial mediation effect. Table 5 shows the partial mediating effect of IE. The p value for the mediation effect of IE between Hope and EI is 0.039 and thus hypothesis H9 is supported. The p -value for the mediation of IE between Self-efficacy and EI is also 0.039, accepting the hypothesis H10. Hypothesis H11 which shows the

Table 2. Discriminant validity (Heterotrait-Monotrait Matrix)

	Efficacy	Entrepreneurial intention	Hope	Individual expectancy	Optimism
Entrepreneurial intention	0.812				
Hope	0.854	0.813			
Individual expectancy	0.677	0.815	0.658		
Optimism	0.816	0.795	0.822	0.665	
Resilience	0.872	0.813	0.802	0.699	0.870

Source(s): Authors' own work

Table 3. Collinearity statistics

Path	Variance inflation factor (VIF)
Efficacy → EI	2.67
Efficacy → IE	2.623
Hope → EI	2.49
Hope → IE	2.447
Individual expectation → Entrepreneurial intention	1.782
Optimism → EI	2.566
Optimism → IE	2.511
Resilience → Entrepreneurial intention	2.832
Resilience → Individual expectation	2.712

Source(s): Authors' own work

Table 4. Path coefficients

	Standard deviation	T statistics	P value	Decision
H1: Hope → Entrepreneurial intention	0.060	3.397	0.001	Supported
H2: Efficacy → Entrepreneurial intention	0.062	2.203	0.028	Supported
H3: Resilience → Entrepreneurial intention	0.052	2.825	0.005	Supported
H4: Optimism → Entrepreneurial intention	0.055	2.465	0.014	Supported
H5: Hope → Individual expectation	0.066	2.363	0.018	Supported
H6: Efficacy → Individual expectation	0.072	2.251	0.024	Supported
H7: Resilience → Individual expectation	0.077	3.376	0.001	Supported
H8: Optimism → Individual expectation	0.075	2.352	0.019	Supported
H9: Individual expectation → Entrepreneurial intention	0.057	5.995	0.000	Supported

Source(s): Authors' own work

Table 5. Specific indirect effects

	Standard deviation	T statistics	P values	Decision
H10: Hope → IE → EI	0.026	2.062	0.039	Supported
H11: Efficacy → IE → EI	0.027	2.067	0.039	Supported
H12: Resilience → IE → EI	0.031	2.878	0.004	Supported
H13: Optimism → IE → EI	0.028	2.136	0.033	Supported

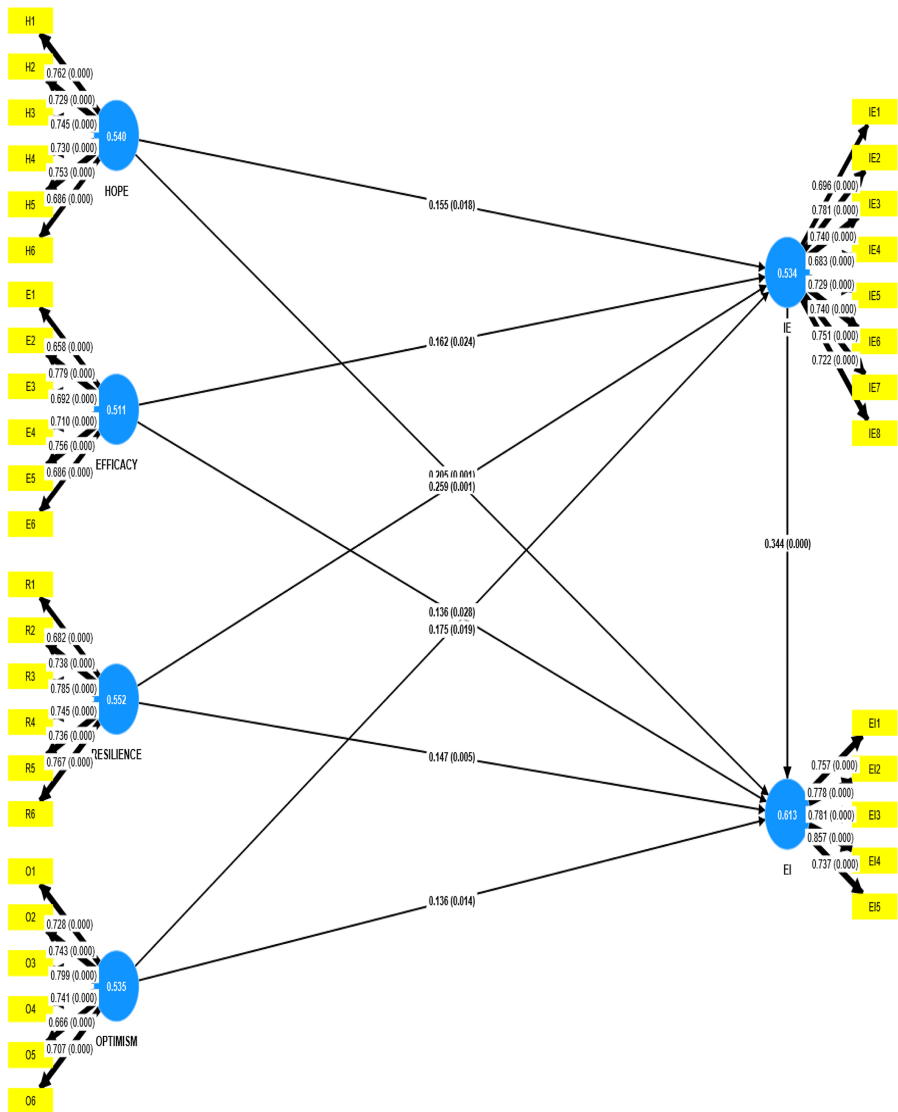
Source(s): Authors' own work

mediation of IE between Resilience and EI is also accepted as it has the *p*-value equal to 0.004. The last sub-construct of PsyCap is Optimism, it is also found that the relation between Optimism and EI is also mediated by IE as the *p*-value for this relation is 0.033 and hence supporting H12. Overall, it is seen that IE mediates between the PsyCap and EI of collegiate students.

Based on the analysis part, the final model of the study denoting the relationship among the constructs of the study and as obtained from PLS-SEM is given in Figure 3. These results show that Hope significantly impacts EI and IE as *p*-value equals 0.001 and 0.018 respectively and acceptance of hypotheses H1 and H5. Self-efficacy also contributes towards the EI and IE with *p*-values 0.028 and 0.024, accepting the H2 and H6. Subsequently, the *p*-values 0.005 and 0.001 signify the positive relations between Resilience and EI and IE and support the hypotheses H3 and H7. The acceptance of hypotheses H4 and H8 is supported by the *p*-values between Optimism and EI (0.014) and Optimism and IE (0.019). The direct effect of IE on EI is signified by the acceptance of hypothesis H9 with a *p*-value (0.000). Table 4 shows the path coefficients and acceptance of hypotheses H1 to H9.

6. Conclusion, limitations and consequences

The motive of current analysis is to explore the association among PsyCap, IE and EI in the context of university students pursuing professional courses (i.e. management and engineering). Based on the results, it is revealed that all four components of PsyCap (hope, efficacy, resilience and optimism) significantly impact the EI of college students. Hope is found to have the most significant relationship with EI followed by resilience, optimism and efficacy which means that the students with higher levels of hope have higher intentions toward entrepreneurial outcomes. Also, the PsyCap components show a positive relation with the IE. Further, it is evident that IE positively impacts the EI of college students and is also



Source(s): Authors' own work

Figure 3. Results of PLS-SEM

mediated between the PsyCap and EI. Moreover, the findings of this study are in line with the previous studies in relation between PsyCap and EI (Madar *et al.*, 2019; Cui, 2021).

These assumptions and results are in line with the other studies as PsyCap -based factors positively affect the EI of collegiate students and play a vital factor in the enhancement of entrepreneurs' enactment which promotes the cognitive involvement of college students and contributes to the growth of EI (Contreras *et al.*, 2017; Maslakçı *et al.*, 2021). Various studies empirically established that the sub-elements of PsyCap, that is self-efficacy, optimism, hope and resilience (Luthans and Youssef, 2007) are extremely interrelated with entrepreneurship

(Fresé and Gielnik, 2014). As a unified structure, PsyCap positively affects the EI (Contreras et al., 2017). Expectancy theory provides possible explanations for EI as it significantly impacts the IE (Renko et al., 2012).

Over the past 20 years, numerous researchers have studied entrepreneurship with a primary focus on understanding the causes of EI (Krueger et al., 2000; Zhao et al., 2005). Although expectancy theory is primarily used in the motivation domain but later used by many researchers in the context of entrepreneurial behavior. Numerous research studies have examined entrepreneurial motivations for starting businesses using the expectancy theory as a primary framework (Locke and Baum, 2007). This study is a pioneer in exploring the mediation effect of IE between PsyCap and EI of college students. Moreover, the results supported all our formulated hypotheses. The components of expectancy are more affected by resilience than any other construct of PsyCap. Also, the mediation effect of expectancy between Resilience and EI is much better than the other components of PsyCap.

6.1 Study contributions

As an academic contribution, study findings contribute to the enhancement of the EI literature, secondly, findings can affect the collegiate business and engineering education that impact entrepreneurship development among students. As a practical contribution, universities can redesign their entrepreneurship development curriculum for engineering/management students. Subsequently, it helps those educators who engage in entrepreneurship development courses in order to nurture their students in the best possible manner. Consequently, it impacts those individual students who possess high intensities of entrepreneurial PsyCap and are more likely to be future entrepreneurs.

6.2 Limitations of the study

Like any other study, this study is not without limitations (Singh et al., 2021a; Singh and Kushwaha, 2024). Firstly, this study's small sample size only adequately explains the overall state of students' EI but cannot explain the situation in general. Secondly, the nature of the present study is based on cross-sectional analysis. Future scholars may conduct a longitudinal study to explore the better and more precise interrelationships between variables.

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About the authors

Anoop Kumar is doctoral research scholar in Amity Business School at Amity University Gwalior, India. His particular research interest is in the area of Entrepreneurial Intentions, Entrepreneurial Behaviour and Entrepreneurship Inclination.

Dr Pankaj Singh is an Associate Professor of Marketing Science in the School of Business at Galgotias University, Greater Noida, India. He completed his doctoral research in marketing domain at ABV-Indian Institute of Information Technology and Management, Gwalior, Madhya Pradesh. He holds a masters' in International Business Management and M.Phil. in Marketing and his particular research interest is in the area of Service Marketing, Entrepreneurial Marketing, Entrepreneurship Development and Public Policy Analysis. He has more than 14 years of experience in academics. Pankaj Singh is the corresponding author and can be contacted at: pankajabviiitm@gmail.com

Dr Anil Singh Parihar is as Associate Professor of Management in Department of Management at Manipal University Jaipur. He has more than 15 years of experience in academics. He actively participate in seminar, conferences and workshops. He has published various articles in journals.

Dr Sanjeev Saraswat is an Assistant Professor of Marketing domain in Institute of Business Management at GLA University, Mathura, India. He completed his doctoral research in the marketing domain at Jiwaji University, Gwalior, Madhya Pradesh. He has more than 20 years of experience in academics.