

Role of Higher Education Institutions in Perceived Behaviour Control and Entrepreneurial Readiness of Undergraduate Students in Kerala

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A b s t r a c t

The present study intends to examine the role of higher education institutions (HEIs) in Kerala in influencing the perceived behaviour control and entrepreneurial readiness of undergraduate students. The extent to which the institutional support and curriculum influenced the shaping of confidence and motivation of students towards entering an entrepreneurship career was examined using Structural Equation Modeling. A questionnaire-based survey was conducted among 276 final year undergraduate students in Kerala. The study revealed that the direct effect of HEIs on entrepreneurial readiness was insignificant, but the indirect effect through perceived behaviour control was found to be significant.

Keywords: *Higher education institutions, perceived behaviour control, entrepreneurial readiness, entrepreneurship*

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Introduction

Studies have evidenced that Higher Education Institutions (HEIs) play an important role in promoting regional economic development (Lehmann, 2015). The concept of 'academic entrepreneurship' (Lehmann et al., 2020), which Sandstrom et al. (2018) defined as venture creation from research in educational institutions, has been accepted to be important. Thus, education institutions' role from academic knowledge centres and creators of human capital (Audrestsch & Lehmann, 2005) has changed to platforms for policymakers to promote innovation and growth (Sandstrom et al., 2018). In this context, higher education institutions are now seen as centres for developing entrepreneurial behaviours (Cunningham et al., 2019).

Given the role of HEIs in entrepreneurship, it is important to understand to what extent these institutions are capable of influencing the preparedness of their students to engage in entrepreneurship activities. It is also equally important to understand how it influences a students' perception of easiness or difficulty in engaging in entrepreneurial activity. An educational institution can influence the students' preparedness for entrepreneurship and their understanding of its difficulty in two ways - through the institutional support it provides and the curriculum through which education and skills are imparted. The present study attempts to identify the effect of higher education institutions' internal environment on the entrepreneurial readiness and perceived behaviour control of undergraduate students in Kerala. Thus the study hypothesised that the higher education institutions influence the perceived behaviour control and entrepreneurial readiness of the students. It is also hypothesised that the perceived behaviour control influences the entrepreneurial readiness of the students. If evidence provides support to the hypothesised relations, the study can add to the existing literature that a carefully designed curriculum and institutional support can positively affect the perception of students on undertaking businesses successfully and thereby preparing them for a successful entrepreneurship career ahead.

2. Theoretical Framework development and Measurement of Constructs

2.1. Entrepreneurial Readiness

The readiness to entrepreneurship is an individual's cognitive competence and entrepreneurial willingness towards a venture creation (Lau et al., 2012). Ruiz et al. (2016) defined entrepreneurial readiness as the convergence of personal traits that differentiate individuals based on their creative and productive potential to deploy their capability for self-achievement. Ajzen (1991) considered it as a person's willingness to carry out a certain behaviour. The determinants of entrepreneurial readiness consist of sociological, psychological, and business management factors (Coduras, Saiz-Alvares, & Ruiz, 2016) but Baringer & Ireland (2008) proposed entrepreneurial opportunity and entrepreneurial intention as the determinants of entrepreneurial readiness. A number of studies have identified various factors as components of entrepreneurial readiness. Based on the studies of Barringer & Ireland (2015), Choo & Wong (2006), McClelland (1961), Mitchell et al. (2002), Olugbola (2017), Shane & Venkataraman (2000), and Souitaris et al. (2007), the present study defines the major components of entrepreneurial readiness as **Opportunity identification** (Barringer & Ireland, 2015; Mitchell et al., 2002), **Motivation** (Choo & Wong, 2006; McClelland, 1961), **Resource utilisation** (Mosakowski (1998) & Wu (2007)) and **Entrepreneurial ability** (Souitaris et al., 2007).

2.2. Perceived Behaviour Control

Perceived behaviour control (PBC) means an individual's perception of the easiness or difficulty of performing a behaviour of interest (Ajzen, 1991). It is believed that one can start a venture by having the necessary resources and opportunities (Zhang et al., 2015). It is a measure of behavioural intention and the behaviour of oneself (Ajzen, 1991). Maes et al. (2014) found that internal and external control beliefs form PBC, which are linked to personal capabilities and situational control. Researchers have varied views about PBC, and some of them (Krueger et al., 2000; Kolvereid & Isaksen, 2006) suggested that PBC and self-efficacy (Bandura, 1977) are similar constructs. On the other hand, Armitage & Conner (2001) and Kraft et al. (2005) suggested that PBC has two components: self-efficacy and perceived

controllability. Self-efficacy (internal factor) means one's ability or confidence to perform the behaviour. Perceived controllability is an external force, and hence it shows one's ability to execute the behaviour. Vamvaka et al. (2020) opined that perceived controllability includes resources, opportunities and potential barriers. Perceived behaviour control is an antecedent of a person's behaviour readiness (Vamvaka et al., 2020) of starting a business in future. The present study adopts the definition of perceived behaviour control developed in the studies of Ajzen (1991), Linan & Chen (2009) and Vamvaka et al. (2020). Based on Vamvaka et al. (2020), perceived behaviour control is composed of **Perceived difficulty** (Guerrero et al., 2009; Kolvereid, 1996), **Perceived confidence** (Guerrero et al., 2009; Grundsten, 2004; Vamvaka et al., 2020), and **Perceived controllability** (Linan & Chen, 2009; Kolvereid, 1996).

2.3. Role of Higher Education Institutions

Turker & Secuk (2009) identified that institutional support to entrepreneurship relates to the policies, regulations and programmes that are implemented to support entrepreneurship. Higher education institutions play the role of a catalyst in providing support and encouragement to the creative potential of their students (Alencar et al., 2017). Saeed et al. (2015) suggested that institutional support, supplemented by concept development support and business development support, can play a vital role to shape students' entrepreneurial self-efficacy. In Lehmann (2015), HEIs were identified as capable of playing the role of key agents in promoting competitiveness. Audretsch & Lehmann (2005) argued that the role of higher education institutions have changed from that of generators of academic knowledge to that of vehicles to promote growth and innovation. Consequently, institutions become key role players in contributing to economic growth and aiding entrepreneurial behaviours (Guerrero, Cunningham, & Urbano, 2015). Colombo et al. (2019) identified that in the 'entrepreneurial ecosystems', which specifies how entrepreneurs interact with their environment, HEIs could play an anchor role. It is because HEIs, on the one hand, contribute to the advancement of science and technology, and on the other hand, they play a leadership role by creating entrepreneurial thinking (Hayter, 2016). The internal dimensions of higher education institutions

in this regard are important (Lehmann et al., 2020). The present study defines the role of HEIs to be composed of **Institutional support**, based on Alencar et al. (2017), Saeed et al. (2015), and Turker & Selcuk (2009), and **curriculum**, based on Garavan & O'Kinneide (1994), Moses & Akinbode (2014), and Keat et al. (2011).

3. Hypotheses formulation

Higher education institutions can provide a catalytic effect to encourage the creative potential of students (Alencar et al., 2017). Saeed et al. (2015) provided evidence that the educational support provided by the institutions can shape the entrepreneurial efficacy of students. The curriculum designed by the institutions should satisfy the students as well as the industry requirements (Pittaway et al., 2009), which in turn, would enhance the competencies needed for an entrepreneur (Bager, 2011). Moses & Akinbode (2014) and Mahajar & Yunus (2012) also argued that entrepreneurship education through curriculum would impact the students' entrepreneurial skills. Thus, the students can gain in their readiness to select entrepreneurship as a career choice. It can, in turn, affect the way in which students perceive the level of easiness with which they can succeed in business. Based on the evidence from the literature, the following hypotheses were formulated:

H1: *Higher education institutions have a significant positive effect on perceived behaviour control of students*

H2: *Higher education institutions have a significant positive effect on the entrepreneurial readiness of students*

H3: *Perceived behaviour control has a significant positive effect on the entrepreneurial readiness of students*

4. Methodology

The study intends to identify the effect of higher education institutions on entrepreneurial readiness and perceived behaviour control of undergraduate students in Kerala. Thus, the constructs in this study include entrepreneurial readiness, perceived behaviour control, and the role of higher education institutions. The undergraduate students' Entrepreneurial readiness was developed as a higher-

order latent construct composed of four lower-order components—Opportunity identification, Motivation, Resource utilisation, and Entrepreneurial ability (Barringer & Ireland, 2015, and Mitchell et al., 2002). Opportunity identification was measured using the indicators developed by Baron (2004) and Davidsson & Honig (2003) and consisted of a four-item scale. It captures the ability of students to identify successful business opportunities and convert an opportunity to a successful business (Shane & Venkataraman, 2000). The motivation was measured using the items developed by Choo & Wong (2006), Coduras et al. (2016), and Olugbola (2017) and consisted of a three-item scale. It is the individual's desire to perform a directed behaviour (McClelland, 1961) and profit motive (Choo and Wong, 2006). Resource utilisation was measured using items developed by Mosakowski (1998), Olugbola (2017) and Seun & Kalsom (2015) and consisted of a four-item scale. It captures the ability to use resources in business (Wu, 2007). Entrepreneurial ability was measured using the items developed by Barringer & Ireland (2015), Gruber (2004), and Zahra (2011) and consisted of a four-item scale. All items were anchored on a five-point Likert-type scale (1= strongly disagree to 1= strongly agree).

The second construct, Perceived behaviour control, was developed as a higher-order latent construct composed of three lower-order components – Perceived difficulty, Perceived confidence, and Perceived controllability (Kolvereid, 1996; Vamvaka et al., 2020; and Linan & Chen, 2009). The perceived difficulty was measured using items developed by Guerrero et al. (2009) and Kolvereid (1996) and consisted of a two-item scale. It captures the perception of how easy it is to pursue and manage a business. Perceived confidence was measured using items developed by Guerrero et al. (2009), Grundsten (2004), and Vamvaka et al. (2020) and consisted of a four-item scale. It captures how the respondents are confident of their own skills to succeed in business. Perceived controllability was measured using items developed by Linan & Chen (2009) and Kolvereid (1996) and consisted of a three-item scale. It captures the extent to which the respondent believes the external environment of doing business was under their control. All items were anchored on a five-point Likert-type scale (1= strongly disagree to 1= strongly agree).

The third construct Role of higher education institutions, was developed as a higher-order latent construct composed of two lower-order components - Institutional support and Curriculum (Alencar et al., 2017; Garavan & O'Cinneide, 1994; and Keat et al., 2011). Institutional support was measured using items developed by Alencar et al. (2017), Saeed et al. (2015) and Turker & Selcuk (2009) and consisted of a four-item scale. It captures the role of the institutions in developing and nurturing entrepreneurial creativity among students. The curriculum was measured using items developed by Garavan & O'Cinneide (1994), Moses & Akinbode (2014), Keat et al. (2011), and Zegeye (2013), and consisted of a four-item scale. It captures the students' opinion on whether the curriculum is capable of accommodating the changing needs of business and involves real-life case-based learning tools. All items were anchored on a five-point Likert-type scale (1= strongly disagree to 1= strongly agree).

The study was conducted across the arts and sciences colleges in Kerala. There are sixty-six government colleges and 163 aided colleges in the arts and science category in Kerala. The state is divided into five administrative zones on a geographical basis for the regulation of aided colleges. To ensure geographic representation across the state of Kerala, three aided colleges from each of the five zones and one government college from five districts were selected as samples. A total of fifteen aided colleges and five government colleges formed the sample for the study. Fifteen students from each of the selected colleges formed the respondents for the study. A survey questionnaire was developed and employed to collect the students' perceptions of the constructs under study. The data were collected only from the final year undergraduate students since they have the highest level of academic experience and exposure to curriculum and learning. With 225 students from the aided colleges and 75 students from the government colleges, the intended total sample size was 300. Sample departments were randomly selected based on the number of arts and science departments in each college. From the selected departments, final year students were approached for data collection. Based on their willingness to respond, qualified students were identified for sample selection. A total of 309 students completed the survey. However, only 276 (89 per cent) responses were identified

to be used for data analysis. Approximately 57 per cent of students were females. Forty-one per cent of students belonged to the science stream, thirty-six to the commerce and management stream and the remaining to the arts stream. The relations between the constructs were analysed through structural equation modelling. The model assessment was performed using SmartPLS Version 3.0.

5. Data Analysis and Results

The entire data collected from the respondents were examined for missing values and outliers. Examination of data revealed some cases of missing values, which were removed list-wise. Outliers in data are considered to be extreme values that fall outside the expected population values for a single variable (Tabachnick & Fidell, 2013). If outliers are not identified and managed, it can severely distort the estimation of parameters, and thereby, the validity of the study (Carter, Schwertman, & Kiser, 2009). The study has employed z-scores to detect univariate outliers, with items falling above ± 1.96 considered outliers (Grove, Burns, & Gray, 2013) and are removed from the final data set. Univariate normality of data was also examined to identify whether the data followed normal distribution characteristics. Skewness and kurtosis values were computed using SPSS Version 25.0. It was found that the values were within ± 1.00 in all cases, proving that the data followed a normal distribution. The analysis of relations between constructs was done in two stages: (1) Measurement model evaluation and (2) Structural model assessment. The minimum sample size required (Hair, Ringle, & Sarstedt, 2011) to perform structural equation modelling analysis was examined using G*Power. The minimum sample size was computed to be 102, and the actual sample used for analysis is 276, which is adequate.

5.1. Measurement Model Evaluation

After the removal of outliers, a measurement model was performed to ensure that the data were reliable and valid. The constructs were identified as reflective in nature, and the hierarchical order of the components was measured using latent variable scores through a two-stage approach. The measurement model was evaluated through a Confirmatory Factor Analysis by ensuring that the constructs and their measures exhibit construct

reliability (internal consistency), convergent validity and discriminant validity. **Construct reliability** is a measure of the quality of construct, and shows the stability of measurement (Sekaran & Bougie, 2010), and is measured by Cronbach's alpha (Cronbach, 1951) and composite reliability (Janadari, Subramaniam, & Wei, 2016). It is seen that for all components, computed values of Cronbach's alpha are above the minimum value (0.70) recommended by Nunnally and Bernstein (1994) for reliability. The computed composite reliability values are above 0.60, recommended by Henseler & Sarstedt (2013) and below the threshold limit (0.95) recommended by Drolet & Morrison (2001). Thus the reliability of the measurement model is established. **Convergent validity** is a measure of the accuracy of a measure, truly representing a concept (Zikmund et al., 2013), and is measured by item loadings and Average Variance Extracted (AVE) (Hair et al., 2014). Item loadings for all indicators on its respective component factors are above the minimum of 0.708 recommended by Hair et al. (2017). AVE for all components is above 0.50, as recommended by Hair et al. (2017). Hence convergent validity is established. Tables 1, 2 and 3 give the reliability and convergent validity results. **Discriminant validity** is a measure to which a construct is truly distinct from all other constructs (Hair et al., 2017) and do not correlate highly with other constructs (Campbell, 1960). It is measured using Fornell-Larcker Criterion (Fornell & Larcker, 1981). The computed F-L criterion values of each component are less than the correlation of that component with all other components (Table 4). Since the criterion satisfies the prescribed conditions recommended by Fornell & Larcker (1981) and Hair et al. (2014), it is concluded that the model possesses discriminant validity. Since it was confirmed that the model satisfies all the requirements of reliability and validity, the structural model is assessed (Chin, 2010).

Table 1: Measurement Model Stage 1 (Perceived Behaviour Control)

Components & it's Indicators	Loadings	Compos- ite Reliability	AVE	Cron- bach's alpha
Perceived difficulty		0.740	0.705	0.732
Easy to Keep business viable	0.884			
Easy to pursue entrepreneurship	0.793			
Perceived confidence				

High chance of success in business	0.781	0.744	0.710	0.741
Skills and capabilities of entrepreneur	0.814			
Confidence to succeed in business	0.892			
Start a firm and keep it viable	0.879			
Perceived controllability				
Control creation process of firm	0.860	0.722	0.683	0.717
Few events to prevent from entrepreneurship	0.871			
complete control over the situation	0.742			

Table 2: Measurement Model Stage 1 (Higher Educational Institutions)

Components & it's Indicators	Loadings	Compos- ite Reliability	AVE	Cron- bach's alpha
Institutional support				
Help to nurture creativity	0.864	0.779	0.753	0.737
Improve social skills	0.822			
Inspire venture planning	0.889			
Entrepreneurship training & support	0.895			
Curriculum				
Update to accom- modate business environment	0.784	0.791	0.754	0.746
Enhance learning experience	0.888			
Case-based learning experience	0.804			
Create entrepreneuri- al attitude	0.850			

Table 3: Measurement Model Stage 1 (Entrepreneurial Readiness)

Components & it's Indicators	Loadings	Compos-ite Reliability	AVE	Cron-bach's alpha
Opportunity Identification				
Find successful opportunity	0.823	0.710	0.667	0.704
Convert opportunity to business	0.778			
Search for business than job	0.809			
Linkages to start business	0.853			
Motivation				

Desire to start business	0.778	0.752	0.721	0.742
Desire to succeed in business	0.903			
Desire to be self-sufficient	0.861			
Resource Utilisation				
Own resources to run business	0.913	0.743	0.709	0.721
Nurtured ability to use resources	0.818			
Secure finance and credit	0.791			
Entrepreneurial ability				
Shape conditions to benefit business	0.818	0.711	0.655	0.702
Abilities help to run business	0.797			
Develop successful business plans	0.786			
Manage teams to use resources	0.835			

Table 4: Measurement Model Stage 1: Fornell-Larcker Criterion

Compo-nents	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Institu-tional support (1)	0.868								
Curricu-lum (2)	0.353	0.809							
Per-ceived difficulty (3)	0.397	0.446	0.840						
Per-ceived confi-dence (4)	0.408	0.496	0.453	0.843					
Per-ceived control-lability (5)	0.405	0.363	0.389	0.408	0.826				
Oppor-tunity identi-fication (6)	0.49	0.36	0.52	0.413	0.49	0.817			
Motiva-tion (7)	0.481	0.382	0.487	0.369	0.384	0.443	0.785		
Re-source utiliza-tion (8)	0.482	0.516	0.476	0.475	0.351	0.447	0.489	0.842	
Entre-pre-neurial ability (9)	0.404	0.416	0.353	0.355	0.496	0.442	0.457	0.45	0.809

5.2. Structural Model Assessment

Since the structural model presents the relations or paths between the constructs, its assessment helps to determine the model's capability to predict the outcome construct (Hair et al., 2017). The structural equation model was based on the partial least squares method, and hence, the focus is on the assessment of the model's predictive capability (Janadari, Subramaniam, & Wei, 2016). Thus, the structural model path coefficients, coefficient of determination (R^2), and predictive relevance (Q^2) of the model are assessed. Tables 5 and 6 gives the results. The relation (path coefficient) from the role of higher education institutions to perceived behaviour control has a value of 0.472, showing a high positive relation which is statistically significant ($t = 8.043$; $p < 0.001$). The relation from Higher education institutions to entrepreneurial readiness has a low value of 0.063, showing a very low relation which is statistically not significant ($t = 1.094$; $p = 0.277$). The relation from Perceived behaviour control to entrepreneurial readiness has a value of 0.512, showing a high positive relation which is statistically significant ($t = 14.165$; $p < 0.001$). Though the direct effect of HEIs on entrepreneurial readiness (path coefficient = 0.063) is not significant, it is important to examine two more effects – (i) indirect effect of HEIs through the mediator (perceived behaviour control) on entrepreneurial readiness; and (ii) total effect of HEIs on entrepreneurial readiness, which is the sum of the direct effect and indirect effect. The indirect effect (HEIs \rightarrow Perceived Behaviour Control \rightarrow Entrepreneurial Readiness) is the product of two direct relations (HEIs \rightarrow Perceived Behaviour Control) and (Perceived Behaviour Control \rightarrow Entrepreneurial Readiness). The indirect effect is found to be 0.242. The total effect (sum of the indirect effect of HEIs on Entrepreneurial readiness through Perceived behaviour control and the direct effect) is found to be 0.305. The results are given in Table 6. Thus it can be concluded that though HEIs do not directly affect entrepreneurial readiness, the total effect is quite high, indicating the relevance of HEIs in explaining entrepreneurial readiness.

Table 5: Structural Model: Path Coefficients			
Paths	Path Coefficients	T-static	p value
Role of HEIs \rightarrow Perceived Behaviour Control	0.472	8.043	< 0.001

Role of HEIs \rightarrow Entrepreneurial Readiness	0.063	1.094	0.277
Perceived Behaviour Control \rightarrow Entrepreneurial Readiness	0.512	14.165	< 0.001

Table 6: Direct, indirect and Total Effects		
Effects	Paths	Path Coefficients
Direct	Role of HEIs \rightarrow Entrepreneurial Readiness	0.063
Indirect	Role of HEIs \rightarrow Perceived Behaviour Control	0.472
	Perceived Behaviour Control \rightarrow Entrepreneurial Readiness	0.512
Specific Indirect	(Role of HEIs \rightarrow Perceived Behaviour Control) * (Perceived Behaviour Control \rightarrow Entrepreneurial Readiness)	0.242
Total	(Role of HEIs \rightarrow Entrepreneurial Readiness) + [(Role of HEIs \rightarrow Perceived Behaviour Control) * (Perceived Behaviour Control \rightarrow Entrepreneurial Readiness)]	0.305

Coefficient of Determination (R^2) is a measure of the model's predictive accuracy, showing the amount of variance in the predicted construct explained by its related predictors. The R^2 value of Perceived behaviour control is 0.527, meaning that 52.7 per cent of the variance in Perceived behaviour control is explained by its predictor (HEIs) and is statistically significant ($t = 15.167$; $p < 0.001$). The R^2 value of entrepreneurial readiness is 0.403, meaning that 40.3 per cent of the variance in entrepreneurial readiness is explained by its predictors (HEIs and Perceived behaviour control) and is statistically significant ($t = 8.711$; $p < 0.001$). As recommended by Henseler et al. (2009), the predictive accuracy of perceived behaviour control is moderate (above 0.50), while the predictive accuracy of entrepreneurial readiness is weak (between 0.25 and 0.50). In addition to predictive accuracy (R^2), Stone-Geisser's Q^2 value (Geisser, 1974; Stone, 1974) measures the model's predictive relevance. It measures how accurately the model predicts the values of the indicators in the measurement model and has to be larger than zero (Hair et al., 2017). The computed values of predictive relevance of Perceived behaviour control is 0.473 and of Entrepreneurial readiness is 0.297, which implies that the model has good predictive relevance for both constructs. Results are given in Table 7. Thus, the structural model assessment results prove that the effect of higher education institutions on

entrepreneurial readiness is fully mediated by the perceived behaviour control of the students.

Table 7: Structural Model: R² and Q²

Paths	R ²	T-static	p value	Q ²
Perceived Behaviour Control	0.527	15.167	< 0.001	0.473
Entrepreneurial Readiness	0.403	8.711	< 0.001	0.297

6. Hypotheses testing

Based on the results of the structural model assessment, since the path coefficients from HEIs to Perceived behaviour control is statistically significant (path = 0.472; $t = 8.043$; $p < 0.001$), the hypothesis H1: *Higher education institutions have a significant positive effect on perceived behaviour control of students* is supported.

Test results show that the path coefficients from HEIs to *entrepreneurial readiness* is not statistically significant (path = 0.063; $t = 1.094$; $p = 0.277$). The hypothesis H2: *Higher education institutions have a significant positive effect on entrepreneurial readiness of students* is not supported.

The relation from Perceived behaviour control to entrepreneurial readiness is found to be statistically significant (path coefficient = 0.512; $t = 14.165$; $p < 0.001$). Hence the hypothesis H3: *Perceived behaviour control has a significant positive effect on entrepreneurial readiness of students* is supported.

7. Discussions

The study made an attempt to develop an entrepreneurial readiness model based on the role of higher education institutions and the perceived behaviour control of the undergraduate students in Kerala. The study found that the perceived behaviour control of undergraduate students consisted of three lower-order components: perceived difficulty, perceived confidence, and perceived controllability. While the students' perceived difficulty measures how easy they believe starting and continuing a business is, perceived confidence measures how sure they are in believing that they can actually succeed in their entrepreneurial career. Perceived controllability measures the students' belief on how well they would be capable of controlling the creation of a business

and how much control they would have over various business situations. The level of perceived behaviour control exhibited by the students was found to have a direct effect on the entrepreneurial readiness of the students. The entrepreneurial readiness of the students was identified to consist of opportunity identification, motivation, resource utilisation, and entrepreneurial ability. The study found that opportunity identification of the students meant their capability to identify a business opportunity and convert such opportunity to a successful business venture. Their focus towards entrepreneurship rather than searching for a job and the linkages and relations they develop were components of their opportunity identification capability. The college students' motivation was reflected by their intense desire to start and succeed in business and their yearning to make profits and be self-sufficient. Resource utilisation of the students was indicative of the possession of sufficient resources needed to start a business and the ability that they have nurtured within themselves to effectively utilise the business resources. Entrepreneurial ability indicated their ability to shape the external conditions so as to benefit their business. It is also composed of the students' capability to develop successful business plans and use their team building skills to make efficient use of business resources.

The major objective of the study was to identify whether the higher education institutions played a critical role in influencing the students' entrepreneurial readiness and their perceived behavioural control. The role of higher education institutions was composed of the institutional level support provided to the students and the curriculum delivered. Institutional support was composed of the institutions' role in helping the students nurture creative and innovative skills so that they can use these skills to pursue entrepreneurship careers. The development and refinement of students' social skills, which would help them interact better with the external business stakeholders, was also part of the institutional support. The level to which the educational institutions could inspire the students

towards an entrepreneurship career and the training and support provided was also an important part of institutional support. The curriculum delivered in the institutions was identified to consist of frequent and relevant updating for accommodating the changing demands of the business environment. A higher level of learning experience delivered to the students with real-life business case discussions and the creation of an entrepreneurial attitude among students was found to be an essential part of the curriculum.

The study found that there existed a weak and insignificant causal relation between higher education institutions and the entrepreneurial ability of the students. It is indicative of the fact that the learning environment in higher education institutions is not directly or closely capable of instilling the skills to identify business opportunities or to motivate them to pursue a business career. On the other hand, the study provided evidence that the higher education institutions had a positive and significant effect on the perceived behaviour control of the students. It means that the instructional deliberations could instil some insights into the students regarding the level of difficulty they would face in their business careers. The institutions also provided insights regarding the level to which the students could exercise control over the business environment. It was also found that the institutions were successful in instilling confidence among the students in their capabilities and skills to ensure success in business. The study also found that the perceived behaviour control of the students had a positive and significant effect on their entrepreneurial readiness. Thus it can be inferred that the perceptions the students develop about the difficulties of succeeding in business and the confidence they develop, and the skills they learn to succeed in it had a positive effect on the ability of the students in identifying successful business opportunities and to make use of business resources effectively.

8. Limitations and Directions for Future Research

Though the concept of entrepreneurial readiness among students in higher education institutions is a widely discussed concept, there exist few evidences to suggest what factors exactly affect such readiness. The readiness of the students towards

an entrepreneurial career may be considered to be a very subjective concept that can be based on abstract measures and influences. The present study has attempted to adopt a limited perspective of the determinants of entrepreneurial readiness among students. Future studies may adopt a more comprehensive view of the causal effects of such readiness. Socio-economic and demographic profiles of the students may also shape the influencing factors that determine their entrepreneurial readiness. For example, a student from a business family background can be largely influenced towards business through an environment external to higher education institutions. Considering the overarching significance of the topic, more studies need to be undertaken with a wider array of variables so as to develop deeper insights for policymakers.

9. Conclusion

The study found that though the role of higher education institutions in influencing the entrepreneurial readiness of the students is weak and insignificant, the indirect effect through perceived behaviour control is found to be significant. The study also revealed that the direct effect of higher education institutions on perceived behaviour control and the direct effect of perceived behaviour control on entrepreneurial readiness of college students was significant. The institutional support provided to the students and the curriculum were significant components of the role of HEIs in inculcating entrepreneurial preparedness. Strengthening linkages with industries and starting business incubators in all colleges could go a long way in enhancing the entrepreneurial readiness of the students.

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