Exploration of Entrepreneurship Education and Innovative Talent Training Model: New Economic Perspective

Jianqiang Lei, Oo Yu Hock, Asif Mahbub Karim

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v11-i11/11319 DOI:10.6007/IJARBSS/v11-i11/11319

Received: 07 September 2021, Revised: 15 October 2021, Accepted: 29 October 2021

Published Online: 20 November 2021

In-Text Citation: (Lei et al., 2021)

Copyright: © 2021 The Author(s)
Published by Human Resource Management Academic Research Society (www.hrmars.com)
This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/ licences/by/4.0/legalcode

Vol. 11, No. 11, 2021, Pg. 1366 – 1382

http://hrmars.com/index.php/pages/detail/IJARBSS JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at http://hrmars.com/index.php/pages/detail/publication-ethics
Exploration of Entrepreneurship Education and Innovative Talent Training Model: New Economic Perspective

Jianqiang Lei¹, Prof Dr Oo Yu Hock², Prof Dr. Asif Mahbub Karim³

¹PhD Candidate, Binary University of Management & Entrepreneurship, Malaysia
²Professor, Asia e University (AeU), Malaysia, ³Dean &Professor, Binary University of Management &Entrepreneurship, Malaysia

Email: jameslei112007@gmail.com

Abstract
In recent years, the network economy marked by e-commerce has developed rapidly, spawned a series of new business models and industrial firms, which have also promoted the development to some extent of the real economy. Especially the outbreak of the Covid-19 pandemic crisis in 2020, internet entrepreneurship through the e-commerce platform and we-media marketing has become the main trend of entrepreneurship under the new normal. This study analyzed the effects of entrepreneurship education (EE) on innovative talent training model, the quantitative data of 400 senior undergraduates from 3 universities in China were collected by questionnaires, the PLS-SEM was adopted to do the proposed data analysis. This study applied the Triple Helix Model of Innovation theory to show the important relevance of government, university, and industry in the innovative development of the new economy. The results showed that the two dimensions of entrepreneurship education: institutional environment and supporting infrastructure have a significant impact on innovative talent training. The findings revealed that the students acquired entrepreneurial capital from university entrepreneurship education programs are very important for the cultivation of innovation capability. and practice-oriented innovative entrepreneurship education should be encouraged to enhance in the new normal economic environment.

Keywords: Entrepreneurship Education, Innovative Talent, Internet Entrepreneurship, New Economic

Introduction
The COVID-19 epidemic at the beginning of 2020 has obviously had a very significant impact on the economic and social life of various countries (World Bank, 2020). The pandemic could destroy our community in multiple ways, including weakening investment, leaving behind long-term economic trauma, unemployment, human capital damage, school education loss, and global trade and supply chain disruptions. A slowdown in productivity growth since the global financial crisis and the combined effects of COVID-19 could have a profound impact on
progress towards social-economic development goals (Pazarbasioglu, 2020). However, in the dilemma faced during the epidemic, the impact of the epidemic on specific industries is not equal. With a large number of offline activities to online, many characteristics of digital track in structural positive changes, especially online education, telecommuting, fresh electricity and Internet medical these four industries, user penetration may be systematically improved, industry structural positive changes, investment is also increased accordingly.

New infrastructure construction, namely new infrastructure, mainly includes 5G base station construction, intercity high-speed rail and urban rail transit, new energy vehicle charging pile, big data center, artificial intelligence, industrial Internet seven fields, involving many industrial chain, is led by the new development concept, driven by technological innovation, based on information network, for high quality development needs, provide digital transformation, intelligent upgrade, integration of innovation infrastructure system.

Under the normal prevention and control of the epidemic, the new infrastructure plays a more prominent role in supporting the realization of sustainable development goals. In 2019, China has built the world's largest optical fiber and mobile communication network. The Ministry of Industry and Information Technology will build more than 500 thousands of 5G base stations. By 2025, China's 5G network construction investment will reach 1.2 trillion RMB, and the investment scale of industrial enterprises is expected to conduct network transformation will reach the next five years of 500 billion RMB. 5G network construction will drive the upstream and downstream industrial chain and industrial application investment of more than 3.5 trillion RMB. At the same time, new forms of business such as e-commerce online shopping and online services have played an important role in fighting the epidemic. We should continue to introduce support policies, comprehensively promote the "Internet Plus", and create new advantages in the digital economy.

Since 1999, China began to expand higher education, the number of students in higher education institutions has more than eight times, from 1 million in 1998 to 8.7 million in 2020. According to the report of the National Bureau of Statistics of China, the unemployment rate in the National Urban Survey remained around 5% from 2014 to 2018. Under the global pandemic, China's State Council announced that the urban survey unemployment rate in 2020 has risen to 6%. The number of college and university graduates reached 9 million in 2021. In such a situation, entrepreneurship education is expected to make a large contribution to creating an impetus for the economy and increasing community income (Idris et al., 2018).

In 2002, the university entrepreneurship education was officially launched in China, because entrepreneurship is an important means to serve economic development and relieve employment pressure, entrepreneurship education is gradually popularized in colleges and universities. Since then, the Chinese government proposed a "mass entrepreneurship, mass innovation" development strategy at the Davos Economic Forum in 2014. Innovation and entrepreneurship education of college students has become a strategic problem of great importance to by the country, society and universities, and its development and effectiveness are directly related to the strategic measures of the construction of an innovative country.

Under the background of the rapid development of new media, college students are active users of new media. They can better accept innovation and entrepreneurship education through the way of new media, which opens up a broader path for the development of innovation and entrepreneurship (Liu, 2016). How to cultivate and improve the innovation and entrepreneurship capability of college students through the new media environment is a problem worth thinking about and discussing.
The rapid development of Internet technology has promoted the changes of the social and economic situation, and the Internet has brought great changes to people’s lifestyle, which makes the development of a variety of e-commerce trade with the Internet as the platform and media. E-commerce has shown strong potential around the world, and people are gradually used to shopping through the online platform and the prosperity of e-commerce. Start and development have also promoted the development and prosperity of related industries, for example, things Stream, Internet finance, etc. The development of Internet technology starts from the economic transformation. With the impetus, various new forms of economic development were born, such as B2B, Start and development have also promoted the development and prosperity of related industries, for example, thingsStream, Internet finance, etc. The development of Internet technology starts from the economic transformation. With the impetus, various new forms of economic development were born, such as B2B, wechat business, online education, live broadcasting, etc. These new forms of economic development are changing people living style, they also create more jobs. After that COVID-19 have a profound impact on the economy and education model through multiple channels, undermining national competitiveness, and social productivity. Obviously, many countries are aware of the urgent need to make use of high-quality online education and training, so the traditional inefficient entrepreneurship education model should be changed as well. Due to entrepreneurship education as an important way to cultivate innovative entrepreneurship talents and increase social productivity, there is an important significance to study the relationship between stakeholders of innovation activities. According to the Triple Helix Model of Innovation that three main stakeholders in the entrepreneurship ecosystem: government, university, and the industry are very important to the innovation (Etzkowitz & Leydesdorff, 1995).

The rapid development of Internet technology has promoted the changes of the social and economic situation, and the Internet has brought great changes to people’s lifestyle, which makes the development of a variety of e-commerce trade with the Internet as the platform and media. E-commerce has shown strong potential around the world. People are gradually used to shopping through online platforms. The rise and development of e-commerce have also promoted the development and prosperity of relevant industries, such as logistics and Internet finance. The development of Internet technology has played a role in promoting the economic transformation, and various new economic forms are born, such as B2B, wechat business, online education, live broadcast sales, etc., these new economic forms change people’s lifestyle, but also create more jobs. Therefore, it is necessary to explore the impact of the Internet new media on the entrepreneurship and employment of college students in the era of Internet new economic transformation, and play a positive role in promoting the social and economic development.

The main purpose of this study is to explore the influence of entrepreneurship education on the innovative talent training mode in China. The world academic circle has done a lot of research in entrepreneurship education, but the lack of demonstration on the fact that entrepreneurial education factors affect students' innovation capability, especially the research on entrepreneurship education from the perspective of the new economy. This study is designed to fill this gap by designing analytical studies using an empirical research approach.
Literature Review

The literature has carried on a lot of research on entrepreneurship education, such as entrepreneurial ability, entrepreneurial culture, innovative spirit, and entrepreneurial intention (Pittaway & Cope, 2006; Lorz et al., 2013; Sirelkhatim & Gangi, 2015; Nabi et al., 2017; Bazan et al., 2020). The previous literature on the field of innovation is mainly focused on national innovation, innovative city, and enterprise innovation levels, but there was a lack of studies seeking to identify and understand potential relationships between entrepreneurship education and innovative talent training model. The triple-helix model of innovation created from the viewpoints of economy and politics is undoubtedly the most famous in interpreting the model of innovation and entrepreneurship education from the national, regional, and university relations (Etzkowitz & Leydesdorff, 2000). Based on the triple-helix innovation model, this study further analyzes the interaction of stakeholders between governments, universities and industries and entrepreneurial capital generated to support the training of innovative talents in the new economic context. In a broad sense, entrepreneurial capital includes human capital and social capital available to entrepreneurs. The new economy refers to the ongoing development of the American economic system. It evolved from the notions of the classical economy via the transition from a manufacturing-based economy to a service-based economy, and has been driven by new technology and innovations (Pratt, 2000). This popular use of the term emerged during the dot-com bubble of the late 1990s, where high growth, low inflation, and high employment of this period led to optimistic predictions and flawed business plans.

The theory of innovation capability interaction holds the innovation is an individual’s behavior in a particular situation, prior experience, personal factors, environmental factors will influence innovation behavior, and then produce innovation results (Woodman & Schoenfeldt, 1990). In China’s business world, social capital implies preferential treatment to exchange and access limited resources, reliable information, and controlled infrastructure. Altshuller (1946) created the TRIZ theory and stated that is a theory of inventive problem-solving. Wang (2017) applied the method of TRIZ decomposition to analyze the problems of cultivating college students entrepreneurial innovation education and constructing the concept model of developing innovation ability, the finding suggests the innovation spirit, the innovative thinking, the entrepreneurial activity, and the entrepreneurial capacity has a positive effect on the entrepreneurial innovation ability.

Entrepreneurship education program is an academic education or formal training interventions that share the broad objective of providing individuals with the entrepreneurial mindsets and skills to support participation and performance in a range of entrepreneurial activities, which tend to focus on building knowledge and skills about or for the purpose of entrepreneurship (World Bank, 2014). Wu (2018) stated entrepreneurial education is a creative education, the establishment of enterprises is not the real goal of entrepreneurial education, its ultimate goal is to cultivate learner’s innovation, entrepreneurial spirit, ability, and literacy so that learners have the ability to achieve their own goals, rather than directly set a certain goal for them.

H1: Entrepreneurship Education Program has a significant relationship on innovation capability.

Institutional environment of a country or region is made up of local rules and conditions, in which local individuals or organizations have legitimacy and support only when they operate (Baumol, 1993). And institutions and rules have always affected entrepreneurial activities, different institutions and rules will cause different results of entrepreneurial activities, so
entrepreneurship research should pay special attention to the role of the institutional environment. Scott (1995) stressed that the institution can make the society stable and have cognitive, normative, and regulatory restraint mechanisms and activities, on the basis of this theory logic he proposed three kinds of restriction behaviors: regulation, normalization, and cognition. 

**H2: Institutional environment has a significant relationship on innovation capability.** 

Supporting infrastructure consists of physical, institutional, and organizational structures that support economic activities such as entrepreneurship. Thus, the infrastructure of entrepreneurial activity exists outside focal firms, and supports the opportunities themselves, people seize and create opportunities, means to create opportunities and an enabling environment. Van de Ven & Garud (1989) stressed the perspective of the social system argues that the three functions of the social system provide the infrastructure essential to the emergence of the industry: the functions of the technical instruments, the functions of resource procurement, and institutional legitimization and governance. 

**H3: Supporting infrastructure has a significant relationship on innovation capability.** 

Peer input refers to peer consultations, which often means interactive work products during the development of an evolving institution, providing open communication of data, insights, and ideas. Harris (1995) argued peer relationships also have a double impact on innovation ability. 

**H4: The relationship between the entrepreneurship education program and innovation capability is significantly influenced by peer input.** 

**H5: The relationship between the institutional environment and innovation capability is significantly influenced by peer input.** 

**H6: Peer input significantly moderates the relationship between supporting infrastructure and innovation capability.** 

Innovation-driven innovation and entrepreneurship education has the most original innovative elements, and is the most typical education mode of innovative talent training. The essential difference between these three modes is the difference in the content of original innovative elements (Chen, 2018). Based on the triple-helix model innovation theory, this study proposed that the university's entrepreneurship education program provides entrepreneurial human capital for students, while the university works with the government and industry to form an innovation network to provide entrepreneurial social capital for students through the institutional environment and supporting infrastructure, peer input may be moderating affect the relationship between social capital and innovation, the empirical analysis will be used to test the following conceptual framework of innovation-driven entrepreneurship education to fill theoretical gaps. 

Zhong (2021) pointed out entrepreneurs need to learn theoretical knowledge through entrepreneurship education. In addition, entrepreneurial capital is particularly important for entrepreneurs. Taking "Internet" as the entrepreneurship platform has the characteristics of low investment cost and easy to operate, which is the best choice for college entrepreneurs. In the condition of only the network and smart phones can conduct online transactions, for college students entrepreneurs entrepreneurial pressure is relatively small. The biggest advantage of this entrepreneurial model is that no need to invest a large amount of capital for hoarding goods, which solves the burden of working capital under the traditional entrepreneurial model. Excellent college student entrepreneurs cannot be separated from efficient training and education. Therefore, the deepening development of college students under the background of the new media network era needs the support of universities. To
establish and improve a perfect network entrepreneurship education system, cultivate and strengthen the network skills, then realize high-quality network entrepreneurship education.

**Methodology**

In this study, the epistemology position of pragmatism was chosen, because this study investigated the real influencing factors and improvement experience that led to the different effect of entrepreneurship education output. The survey design contains a quantitative research source with a structured questionnaire as a research tool (Perri & Bellamy, 2012). It also guides the development of research objectives and assumptions.

**Research Design**

This study is a cross-sectional type of investigation in which the data collected at snapshot of one time because a cross sectional study is particularly suitable for estimating the prevalence of a behaviour in a population (Maree, 2010). The reason for using quantitative methods for this research is to understand the degree of relevance of innovation capability because of the immediacy and communication skills of students and find meaning in this relationship. Among these data collection methods, questionnaires are the most common. The survey instrument will be used to answer the research questions.

**Population and Sampling Technique**

Probabilistic sampling is simple random sampling, which means that each element in the group of interest has an equal and independent chance of being selected (Saunders et al., 2009). In this study, the probability cluster and non-probability convenience sampling method will be used to obtain the information of the respondents from different sources: the probability sampling technique of the students' senior students was a questionnaire investigated by the professional departments and entrepreneurship centers of the students' university. Convenience technology chooses different major student, the instructor of
entrepreneurship project, or entrepreneurship competition for the semi-structured interviews. The total population of senior (Year 3-4) undergraduates in 3 selected Chinese universities in Guangxi, China is 15365 students. Moreover, this study uses clustering sampling to determine the location of data collection by dividing the geographic dispersion of the university. Ochoa (2017) reveals the use of clustering sampling has advantages in research, as it is effective for geographically dispersed populations of raw data collection and needs to be divided by location. Yamane (1967) provides a simplified formula to calculate sample sizes. A 95% confidence level and \( P = 5\% \) are assumed for equation. Where \( n \) is the sample size, \( N \) is the population size 15365, and \( e \) is the level of precision. When this formula is applied to the above sample, we get the equation to calculate a sample size of this study is \( n = \frac{N}{1+Ne^2} \), the sample size: \( n=394 \) respondents. Besides, among total 400 participants, (50.99%) of them were students major in business management, followed by (22.08%) humanities and art and (14.35%) participants who were information technology, while only (12.58%) were trade accounted students. A pilot study was conducted on 50 respondents before the final survey. The questionnaire included 40 questions.

**The Development of Instruments**

Instruments in this study was modified based on relevant literature of previous scholars (Altshuller, 1946; Tyler, 1949; Van de Ven, 1989; Scott, 1995; Timmons, 1998; Polotis, 2008; Xu, 2015). There are six tools: (1) Curriculum System Construction (CSC); (2) Qualified Faculty Assessment (QFA); (3) Institutional Environmental Assessment (IEA); (4) Supporting Infrastructure Assessment (SIA); (5) Innovative Capability Assessment (ICA); (6) Peer Input Assessment (PIA).

Zou (2015) proposed CSC is developing based on the principle of curriculum development (Tyler, 1949), which consists of four dimensions, including curriculum objective, curriculum content, curriculum implementation and curriculum evaluation of entrepreneurship education. Xu (2015) proposed QFA is developing based on the construction of faculty development (Jerome, 2003), which consists of four dimensions, including faculty composition, faculty training, faculty guarantee and faculty management of entrepreneurship education. Scott (1995) proposed IEA is developing based on entrepreneurship environment research, which consists of three dimensions, including normalization, regulation, culture cognition. SIA is proposed based on the development of entrepreneurship infrastructure research (Van de Ven, 1989; Mezias and Kuperman, 2000; GEM Report, 2019), which consists of two dimensions: tangible infrastructure, intangible infrastructure. Wang (2017) proposed ICA is developing based on TRIZ theory of inventive problem solving (Altshuller, 1946), which consists of four dimensions, including entrepreneurial activity, entrepreneurship capacity, innovation spirit, innovative thinking. As U.S. Environmental Protection Agency (PEER REVIEW HANDBOOK 1998) defined PIA is a valuable scientific or technical basis for improving products. This study divided peer input into peer group and peer interaction dimensions according to relevant literature (Hendriks, 1999).

The validity and reliability of this questionnaire were evaluated through predictive trials regarding the sensitivity of predictors of entrepreneurial education. Sekaran and Bougie (2010) argue that it reduces problems caused by wording and bias. Response options for all items range from 1= height disagree to 5= height consent (1= height disagree, 2= disagree, 3= neutral, 4= consent, 5= height consent). Using SmartPLS3.0 run the SEM (structural equation model) to evaluate the research model by a quantitative method.
Measurement Model

PLS first evaluates the goodness of the measurement model by both convergent and discriminant validity. In this research framework, there are three exogenous variables; entrepreneurship education program, institutional environment, support infrastructure, and innovation capability is endogenous variable.

Since the initial scale removed some items after exploratory factor analysis, for validation with a more independent and diverse sample of the revised innovation capability scale (Churchill, 1979), this study performed confirmatory factor analysis (CFA) of the scale by using Smart PLS 3.0 software. The model of confirmatory factor analysis are shown in Figure 2 and $R^2=0.821$ which greater than 0.6 indicates good model fit. SRMR is the difference between the observed correlation and the predicted correlation. Values less than 0.10 (in the conservative sense) are considered a good fit (Hair et al., 2014), while the PLS boot program provides the SRMR standard. So the cutoff of 0.08 seems satisfactory for the PLS path model suggested by Hu and Bentler (1999). The results of this study show that the SRMR value is 0.042, less than the critical value of 0.08. Therefore, it is shown that there is a good fit for the current research model shown in Figure 2 below.

The detection method of measuring variables is generally to see that the Cronbach's Alpha value of cannot be significantly improved after deleting any other item, which complies with the optimal reliability standard proposed by Zhang (2016). As shown in the table below, all Cronbach's Alpha values in this study were greater than 0.9, indicating good reliability.
Table 1: Construct Reliability and Validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s Alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship Education Program</td>
<td>0.963</td>
<td>0.969</td>
<td>0.774</td>
</tr>
<tr>
<td>Institutional Environment</td>
<td>0.948</td>
<td>0.957</td>
<td>0.762</td>
</tr>
<tr>
<td>Supporting Infrastructure</td>
<td>0.963</td>
<td>0.969</td>
<td>0.795</td>
</tr>
<tr>
<td>Innovative Capability</td>
<td>0.965</td>
<td>0.969</td>
<td>0.759</td>
</tr>
</tbody>
</table>

When the AVE is greater than 0.50, the variance shared with the construction and its measure is greater than the error. It is shown that the AVE of each potential variable is above 0.50. However, the scope of AVE is 0.774 (entrepreneurship education program) and 0.762 (institutional environment), 0.795 (support infrastructure), and finally 0.759 (innovation capacity). Table 1 shows that CR for each variable is more than 0.70 based on the Hair et al. (2011) suggestions which indicates that the variables used are fully reliable. The minimum value for CR was 0.957 (institutional environment) and maximum were 0.969 (including entrepreneurship education program, support infrastructure, innovation capacity).

Table 2: Fornell-Larcker Criterion

<table>
<thead>
<tr>
<th></th>
<th>EEP</th>
<th>IC</th>
<th>IE</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEP</td>
<td>0.880</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>0.756</td>
<td>0.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IE</td>
<td>0.811</td>
<td>0.873</td>
<td>0.673</td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>0.814</td>
<td>0.860</td>
<td>0.830</td>
<td>0.892</td>
</tr>
</tbody>
</table>

After the convergent validity, the Fornell-Larcker criterion for the reflection scale measurement is tested, and the cross-load test is the main method to evaluate the differential validity (Fornell and Larcker, 1981). The results in Table 2 show that the AVE square root of each structure is significantly higher than the correlation of each structure, indicating that the structure proposed in this study has sufficient discriminative validity.

Findings

All 400 participants screened into the study were senior undergraduate students. Among them, 301 respondents are female, the other 99 are male, this relates to the universities and majors selected for the survey. The quantitative data of the survey were transferred from the Excel spreadsheet to the SPSS 20 data analysis system at the end of the data collection period. Because there are many items in this study, we carried on the descriptive statistical analysis to each variable, using the data analysis from each item mean, standard deviation, variance. Skewness and kurtosis values were obtained to assess non-normality (Hair et al., 2013). Therefore, the results show that the skewness and kurtosis of most items are between -1 and 1, which indicates that the non-normality of the data is not a problem in this study, the result is shown in Table 3.
Table 3: Descriptive Statistics of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEP</td>
<td>3.640</td>
<td>.79048</td>
<td>.625</td>
<td>-.082</td>
<td>-.174</td>
</tr>
<tr>
<td>IE</td>
<td>3.898</td>
<td>.72540</td>
<td>.526</td>
<td>-.252</td>
<td>-.253</td>
</tr>
<tr>
<td>SI</td>
<td>3.785</td>
<td>.74450</td>
<td>.554</td>
<td>.028</td>
<td>-.447</td>
</tr>
<tr>
<td>IC</td>
<td>3.890</td>
<td>.71516</td>
<td>.511</td>
<td>-.212</td>
<td>-.224</td>
</tr>
<tr>
<td>PI</td>
<td>3.574</td>
<td>.75486</td>
<td>.570</td>
<td>.229</td>
<td>-.215</td>
</tr>
</tbody>
</table>

Structural Model
This study evaluated the path relationship (structural model) in four steps, including collinearity issues, R² levels, t values of standard beta, for guided 5000 resampling in accordance to Hair et al. (2014). The analysis results and data of the model adaptation are shown in figure 2. The R² and adjustment R square are show the fitting degree of the model equation in regression analysis, and Lu (2000) pointed out that greater than 0.6 indicates fitting is good, the innovation capability is demonstrated by a large effect (0.821) with independent variables in this study.

Table 4 The Results of Structural Model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Direct Relationship</th>
<th>Beta</th>
<th>T Values</th>
<th>P Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>EEP -&gt; IC</td>
<td>-0.011</td>
<td>0.167</td>
<td>0.867</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H2</td>
<td>IE -&gt; IC</td>
<td>0.515</td>
<td>7.663**</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>SI -&gt; IC</td>
<td>0.442</td>
<td>4.725**</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01; EEP=entrepreneurship education program, IE=institutional environment, SI=supporting infrastructure, IC=innovation capability; t value> 1.96

The multivariate linear regression were used to test the hypotheses, and the two different effects of adjusting variables are analyzed. To analyze the mechanism of entrepreneurship education on innovation capability, we should first analyze the direct effect of entrepreneurship education on innovation capability. In this study, entrepreneurship education program, institutional environment, supporting infrastructure as independent variables, innovation capability as the dependent variable, and gender, major, family financial background, and entrepreneurial experience as the control variables were put into the regression equation and conducted the multiple regression analysis. The results of the analysis are shown in Table 4, the relationship between entrepreneurship education program (EEP) and innovation capability is not positively significant (β= -.011, p>0.05), but the influence of the other two independent variables on the innovation capability of the dependent variable, institutional environment (β=0.515, p<0.01) and supporting infrastructure (β=0.442, p<0.01) have significant positive effects on innovation capability. All the VIF(EEP=3.589, IE=3.859, SI=3.941) in the model are less than 5 and the tolerance is greater than 0.1, there are no serious collinearity problems (Zhang, 2016). To sum up, the hypothesis testing results do not support H1, but support hypothesis H2 and H3. This result is consistent with Walter...

**Moderator Effect Model**

To further demonstrate the role of peer input in moderating the relationship between entrepreneurship education program (EEP) and innovation capability, this study used Smart PLS 3.0 to draw a model diagram of moderating effect as Figure 4 and Bootstrap method 2000 times to detect the significance of moderator. The results shows that interaction of peer input and entrepreneurship education program ($\beta=0.062$, $p=0.354$), so the P value greater than 0.01, the moderating impact is not significant. Meanwhile, the same inter-variable interaction effect detection method is used to verify whether the other two hypotheses be supported. Figure 4: The Model of Peer Input Moderating Effect Between EEP and IC

![Figure 4: The Model of Peer Input Moderating Effect Between EEP and IC](image)

Regarding verifying the role of the peer input in regulating the relationship between institutional environment and innovation capability, the results show that the P value for the interaction between the peer input and the institutional environment is 0.322 ($p >0.01$), the moderating impact is not significant.

**Table 5 The Results of Moderator Effect Model**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Moderating Effect (PI)</th>
<th>Beta</th>
<th>T Values</th>
<th>P Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4</td>
<td>EEP -&gt; IC</td>
<td>0.062</td>
<td>0.928</td>
<td>0.354</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H5</td>
<td>IE -&gt; IC</td>
<td>0.061</td>
<td>0.991</td>
<td>0.322</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H6</td>
<td>SI -&gt; IC</td>
<td>-0.038</td>
<td>1.352</td>
<td>0.177</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
To demonstrate the role of peer input in regulating the relationship between supporting infrastructure and innovation capability, the results show that the P value of interaction between peer input and supporting infrastructure is 0.177 ($p > 0.01$), so the moderating impact is not significant. This result supports the view of Heger and Veith (2015) stated given the importance of entrepreneurship, public and private organizations are interested in the topic of mechanisms or infrastructure to support entrepreneurship.

This study tries to find out how the adjustment of peer input moderating variables affects the relationship between the acquisition of entrepreneurship education and social capital (institutional environment, support facilities) in entrepreneurship education and the capability of entrepreneurial innovation. However, as shown in the results of Table 5, the three assumptions of H4, H5, H6 do not show any significant effect. But Uzzi and Dunlap (2005) stated that compared with those who focus on gaining personal benefits from social networks and connections, individual actors find themselves in it, attributing social capital to an increased set of information and skills acquired by individual activities and enhancing their capabilities.

**Conclusion**

To summarize, the results confirmed that the results of quantitative analysis show that the university entrepreneurship education program (curriculum system, qualified faculty, entrepreneurship training) has not a significant impact on students' innovative entrepreneurial capability. Whether the social institutions, public awareness, the ecosystem and cultural environment of entrepreneurship have a significant impact on the behavior of entrepreneurs is the hot topics for scholars in recent years. The results of quantitative analysis show that the institutional environment (normalization, regulation, culture cognition) has a significant impact on students' innovative entrepreneurial capability. Furthermore, the results illustrated from the findings that the supporting infrastructure (intangible infrastructure, tangible infrastructure) has a significant impact on students' innovative entrepreneurial capability. The findings of this study also confirmed the current education system and curriculum are not yet mature, teachers are weak, and teaching models are not perfect, which have constrained the country's demand for innovative talents (Lu&Zhang, 2018). The cultivation of innovation capability is a long-term process, and receiving entrepreneurship education is only the starting point of the cultivation of innovation capability, entrepreneurial students need to apply the knowledge with the deepening of entrepreneurial practice activities.

On the other side, peer input is a latent variable especially added to the research model in this study, and whether it has moderating effect on the relationship between social capital (institutional environment, supporting infrastructure) and innovation capability would be explored. The results of quantitative analysis show that the peer input (peer group, peer interaction) has not a positive and significant effect on the relationship between institutional environment and innovation capability, while peer input has not significant moderating effect between supporting infrastructure and innovation capability either. Peer input can help students who lack entrepreneurial experience and practical platform, form networking, inspire and influence student's entrepreneurial intention through their own successful experience and model role (Hendriks, 1999; Yao, 2016). This shows that past studies show that it may be that these scholars have accepted peer input as one of the factors affecting
college students' entrepreneurship, and that the academic role of peer input on students' entrepreneurial intention is a common factor in the field of entrepreneurship education research.

It is recommended that university decision makers implement specific and systematic entrepreneurship education support policies and measures for students and teachers. Because entrepreneurship education has a strong goal orientation at the beginning, whether it is entrepreneurial students or universities, the purpose of entrepreneurship education at the beginning is to improve students' innovative entrepreneurial ability and increase employment opportunities. And the students who participate in entrepreneurial activities, because they have mastered the key resources, technology or innovative products of entrepreneurship, will have a more practical, clearer and more accurate grasp of the content and direction of entrepreneurship education, the students who have obtained entrepreneurial capital, more able to grasp the essential content of entrepreneurship education.

This study made some contributions to the entrepreneurship education study. First, it has provided new theoretical insights grounded in entrepreneurship education, from the perspectives of human capital and social capital levels influence on innovation capability. Second, a developmental approach that focuses on capital advantage and peer influence is applied in the present study for understanding and ultimately predicting innovative behavior. Finally, an empirical model to develop students' innovation capability is proposed which has practical implications for entrepreneurial education and training in China. In particular, it has important theoretical value to explore and narrow the competitiveness of innovative talents and the economical gap between the east and west of China. The new economy takes the Internet economy and e-commerce entrepreneurship as the core model, especially social media including TikTok, WeChat and cross-border e-commerce platforms Shopee and Lazada. Therefore, in the post-epidemic era, college students can focus on the use of new media platforms and free social resources, which can effectively solve the bottleneck problems of student entrepreneurs' lack of social capital and entrepreneurial capital. Specifically, establishing entrepreneurship as a professional subject and set up an independent entrepreneurship teaching and research office, strengthen teacher training in cooperation with enterprises, adopt the mixed teaching method of online and offline, reinforce investment and construction of supporting infrastructure, encourage students to participate in entrepreneurial associations and hold on the entrepreneur's alumni seminars. The innovation-driven based innovative talent training model recommended by this study is shown in figure 5 below.
The epidemic in 2020 has brought upheaval to the world and become the last straw for many small and medium-sized entrepreneurs in the entrepreneurial period, and even reschedule the competition pattern in some industries. Catering, offline entertainment and other industries have been damaged, but online education, e-commerce and other fields have gained explosive growth. This research focuses on clarifying the current situation of entrepreneurship education in Chinese universities, building a theoretical model of university leading entrepreneurship education ecosystem and innovative talent cultivation system, and providing a reference for entrepreneurship education ecology and innovation talent cultivation in Chinese universities. This model concept is also one of the innovation points of this research. Some of the limitations of this study can improve the accuracy of the study by selecting and replacing more control variables in future studies, or expanding research areas, prolonging sampling time, and increasing sample size. In order to increase the applicability of the model and enhance the preciseness of the research, it is necessary for academia, researchers and entrepreneurs to continue to improve in the future research and practice.

References


