



A Study on the Mechanisms of the Influence of Entrepreneurial Cultural Ecology in Higher Education Institutions on the Entrepreneurial Behaviour of Undergraduate Students

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ARTICLE INFO

Article History:

Received: 24 December 2023

Received in Revised Form: 27 March 2024

Accepted: 21 May 2024

DOI: 10.14689/ejer.2024.110.08

Keywords

Entrepreneurial Cultural Ecology,
Entrepreneurial Capabilities, Entrepreneurial
Behaviours, Material Culture, Institutional
Culture.

ABSTRACT

Purpose: The primary objective of this study is to investigate the impact of entrepreneurial ecology on entrepreneurial behaviour and capabilities. **Design/Methodology and Approach:** Data was collected from Chinese students studying in various universities and colleges in China. The data was collected using a combination of research methods. A survey questionnaire was employed to collect quantitative data, while interviews were conducted to gather qualitative data. The data was analysed using SPSS. **Findings:** The study's findings indicate that entrepreneurial culture and its dimensions have a significant impact on entrepreneurial behaviours and capabilities. The present research confirms the proposed mediating role. **Implications:** This study

contributes to the existing body of knowledge by empirically examining the mediating role of entrepreneurial ability in the relationship between culture and behaviour. This research contributes to the limited studies conducted in the context of academia on entrepreneurship and culture. **Originality:** This study aims to investigate the preferences for entrepreneurial behaviour and capabilities among Chinese students. The participants have expressed their preferences regarding spiritualism, institutional support, and leadership ability, which necessitates a study to examine the impact of these factors on their entrepreneurial behaviour.

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Introduction

The shift towards entrepreneurship and innovation in Chinese society can be attributed to the global transition towards a knowledge-based economy (Liu et al., 2017). Another reason for this is the strategic need to cultivate entrepreneurial talent, which is crucial for sustaining economic growth in the country. Furthermore, it holds significant importance for the technological progress of China. The Chinese nation places great emphasis on the creation of economic value from scientific research, as evidenced by its innovation-driven strategy (Li et al., 2020). China's approach is based on the synergy between educational reform and policy support.

It is widely recognised that entrepreneurship plays a crucial role in driving economic development at a global level. The growth and progress of the economy are greatly influenced by the entrepreneurs of a country (Urbano et al., 2020). Thus, it is crucial to offer entrepreneurial education to the population of the country in order to alleviate poverty within the nation. Researchers have placed significant emphasis on the factor of entrepreneurship for a similar reason (Wu et al., 2022). It is crucial for a nation to establish an environment that fosters entrepreneurial spirit among its citizens. The significance of this aspect is recognised by China. They have implemented various measures to promote entrepreneurship at the institutional level.

In higher education institutions, entrepreneurship education is seen as a way to evaluate students' capacity to identify and capitalise on opportunities in their surroundings (Turner & Gianiodis, 2018). Later, these abilities are transformed into successful and valuable enterprises. It demonstrates a proactive approach to addressing the challenges of job creation and poverty reduction at the national level (OGBARI, 2023). Entrepreneurial abilities are highly valued for their capacity to launch successful and competitive ventures in the marketplace.

Research plays a crucial role in shaping the direction of entrepreneurship. Previous research has extensively examined the impact of educational programmes on individuals' ability to succeed as entrepreneurs. Several studies have highlighted the significant impact of entrepreneurial education on the success of ventures. These studies highlighted the significance of entrepreneurial education in fostering a thriving entrepreneurial ecosystem (Elnadi & Gheith, 2021). Some of those studies have also conducted comparative analysis of universities in various geographical regions. In their study, Badri and Hachicha (2019) emphasised the various factors that influence a student's decision to pursue entrepreneurship as a subject.

Question these advancements Institutes offering education in the field of entrepreneurship face several challenges. These organisations should update their education system to align with the global economy (Miço & Cungu, 2023). There has been a growing focus on entrepreneurship education among scholars, with the aim of enhancing students' competency and skills. The environment is crucial for enhancing entrepreneurial education among students (Valencia-Arias et al., 2022). Therefore, it is crucial for educational institutions to prioritise the development of an entrepreneurial environment in order to cultivate the entrepreneurial spirit among students.

Additionally, the role of culture in fostering entrepreneurship education among students cannot be underestimated (Boldureanu et al., 2020). Culture serves as a concrete

link between different societies and their histories. These factors greatly influence human behaviour. Culture plays a significant role in shaping societal norms and influencing the mindset of students. The culture also has a positive impact on the skills and competency of the students (Bonesso et al., 2018). The culture of the institution greatly influences the educational environment and student experience in terms of learning. Culture plays a significant role in the ethical development and inner growth of students, which in turn impacts their entrepreneurial capabilities. The aim of this study is to investigate the impact of the culture and dimensions of entrepreneurial ecology on the behaviour and capabilities of students studying in Chinese educational institutes.

Literature Review

Material Culture and Entrepreneurial Ability

In literature, material status is often described as the physical aspect of society. It signifies the entities that are altered or created by individuals McIver (2016). This object is surrounded by a group of individuals who are part of a community and influences people's attitudes as well. The material culture factor of the entrepreneurial culture has a favourable impact on entrepreneurial ability, as highlighted by Ruiz (2021). The influence of material culture in the context of universities is highly significant. Incubators and spaces are key elements of the material culture found in universities. If students are able to access these places, it will greatly enhance their ability to carry out projects related to innovation. Their entrepreneurial ability will be enhanced as a result. Scientists have highlighted the significance of the environment in fostering entrepreneurship. It is widely recognised that fostering entrepreneurial abilities among students plays a crucial role in their development. In a study conducted by Spigel (2017), it was found that material culture has a significant impact on the entrepreneurial abilities of students. This research provides empirical evidence to support this claim.

Material Culture and Entrepreneurial Behaviour

There is a significant correlation between material culture and the behaviour of entrepreneurship students, including their dehydration levels. The material culture of university spaces plays a crucial role in facilitating students. Osorio et al. (2017) emphasised that educational institutions support entrepreneurial activity at the university level. The studies conducted by Mukesh and Rajasekharan Pillai (2020) and Acs et al. (2018) highlight the significance of culture in enhancing entrepreneurial capabilities. The material status of universities has a significant impact on the promotion of entrepreneurial ventures. The material culture has a positive influence on student behaviour. Spigel (2017).

Behavioural Culture and Entrepreneurial Ability

Behavioural culture plays integral role to shape the practices, values, norms and behaviour of the individuals within a society or a group. It influences the way a person interacts with others and responds to the external factors (Khadhraoui et al., 2016). The study by Morris et al. (2017) revealed that there exists positive as well as significant effect of behavioural culture on the entrepreneurial ability. Different behavioural practices take place within the ecosystem of the education. These behavioural practices involve

workshops and competitions focused on entrepreneurship. Thus, Kiradoo (2021) recommended that managers adopt a competency-based approach to influence the entrepreneurial behaviour of students. In a recent study conducted by Lv et al. (2021), it was found that there is strong empirical evidence supporting the impact of entrepreneurial culture on entrepreneurial ability. These knowledge behaviours have a significant impact on the students' academic knowledge.

Behavioural Culture and Entrepreneurial Behaviour

The behavioural culture factor is crucial in shaping the entrepreneurial behaviour of students. The entrepreneurial activities within universities mirror the students' behavioural culture. The students' active engagement with their education system and university is evident. These factors have a significant impact on the entrepreneurial actions of the students (Lv et al., 2021). In a recent study conducted by Idi and Germinah (2022), an empirical investigation was carried out to analyse the impact of behavioural culture on entrepreneurial behaviour. They discussed the beneficial impact of financial behaviour on entrepreneurship education. The study conducted by Lin et al. (2023) demonstrated the beneficial effects of behavioural culture on the entrepreneurial behaviour of students, leading to an enhancement of their entrepreneurial capabilities and intentions. Based on these findings, the behavioural culture within the education system plays a crucial role in promoting entrepreneurial education.

Institutional Culture and Entrepreneurial Ability

The institutional culture refers to the social system that is established within an organisation to ensure its survival and ability to adapt. The culture's characteristics greatly influence the behaviour, thinking patterns, habits, and beliefs of individuals within a society (Ayob, 2021b). The culture within an institution has the power to influence the actions and mindsets of its members. The university's culture fosters an environment where students are encouraged to take risks and embrace innovation, which in turn cultivates an entrepreneurial spirit (Ayob, 2021a). Conversely, a culture that prioritises hierarchy can have a detrimental impact on entrepreneurship. Emphasising short term goals, being cautious about risks, and having excessive bureaucracy can hinder experimentation and innovative thinking. Students in academic institutions often experience a sense of apprehension when it comes to the possibility of not meeting their expectations. However, students studying in supportive institutes tend to have a stronger inclination towards developing their entrepreneurial skills. The study conducted by Bienkowska et al. (2016) found that the institutional culture has a positive impact on the entrepreneurial ability of students.

Institutional Culture and Entrepreneurial Behaviour

Past studies have examined the correlation between the culture of institutions and the entrepreneurial behaviour of students. There is a reported positive association between the entrepreneurial behaviour of students and the culture of their educational institutes. The support mechanism and policies of the institutes are crucial in fostering entrepreneurship among students. The study by Elnadi et al. (2021) explores the significance of fostering a culture that promotes innovation and entrepreneurial education. However, the study

conducted by Wang et al. (2021) shed light on the entrepreneurial ecosystems found within various universities. Additionally, they explored the role that institutes play in supporting entrepreneurial activities. The research conducted by Mukesh et al. (2020) and Magomedova et al. (2023) highlights the significant impact of institutional culture on fostering entrepreneurial behaviour.

Spiritual Culture; Entrepreneurial Ability and Entrepreneurial Behavior

In literature, spiritual culture is often portrayed as the embodiment of an individual's religious beliefs, which greatly influence their practices, values, and overall beliefs. The cultural aspect of spirituality greatly influences an individual's entrepreneurial aptitude. The culture within higher education institutes is centered around attitudes, values, and ethos related to entrepreneurship. It greatly influences the students' ability and motivation when it comes to their entrepreneurial endeavors. Researchers have emphasized the significance of entrepreneurial competencies and highlighted the role of spiritual culture in fostering these skills. A recent study by Ganzin et al. (2020) further supports this connection between spirituality and entrepreneurship. The study conducted by Dwi et al. (2024) focused on the relationship between spiritual culture and entrepreneurial ability, highlighting a positive association between the two.

In previous studies, a correlation was found between the spiritual culture and behaviour of students studying entrepreneurship (Segaf, 2022). A recent study conducted by Mavjutova et al. (2019) found that having an entrepreneurial mindset can greatly impact the innovation capabilities of students. In addition, Kritikos (2022) uncovered the impact of spiritual culture on the development of entrepreneurial behaviour among students.

Mediating Factors

Entrepreneurial Intention and Entrepreneurial Behavior

Past studies have highlighted a strong correlation between entrepreneurial intention and entrepreneurial behaviour. Perceived as the initial crucial step, intention plays a vital role in captivating students' interest in entrepreneurship activities and fostering a change in their entrepreneurial behaviour (Adekiya & Ibrahim, 2016). The study conducted by Cao et al. (2022) emphasised the significance of entrepreneurship intention in the entrepreneurial process. Some previous studies have also highlighted the importance of having an intention to pursue entrepreneurial activities (Kusumawijaya, 2020). In a recent study conducted by Lihua, (2022), it was found that there is a strong correlation between entrepreneurial intention and entrepreneurial behaviour. The results indicate a significant positive effect of entrepreneurial intention on the actions and decisions of individuals.

Entrepreneurial Cultural Ecology and Entrepreneurial Ability

The success of students' entrepreneurial endeavours is greatly influenced by the entrepreneurial environment, which plays a crucial role in fostering resilience, risk-taking, and innovation among individuals. Cultures that prioritise entrepreneurial activities often emphasise the importance of mentorship, networking, and providing access to resources. It is crucial to note the significant impact that academic pursuits have on enhancing individuals' confidence and skills (Dye, 2019). The student's tolerance level is influenced

by the social attitude. The structure of the educational policy and systems encourages the development of entrepreneurial skills and mindset among individuals. In a recent study conducted by [Jovanović et al. \(2018\)](#), it was found that entrepreneurial ecology has a noteworthy impact on the abilities and attitude of students.

Entrepreneurial Cultural Ecology and Entrepreneurial Behaviour

The friends and families of the students play a significant role in shaping the culture. These factors play a crucial role in shaping an individual's behaviour. Several studies in the past have examined how ecology influences an individual's entrepreneurial behaviour. A culture that encourages and rewards risk-taking and innovation is more likely to foster entrepreneurial behaviour in individuals ([Clevenger & Miao, 2022](#)). An educational system that prioritises problem solving and creativity fosters the development of entrepreneurial skills in individuals. Therefore, the entrepreneurial behaviour is encouraged by the cultural ecology that surrounds it ([Çelikkol et al., 2019](#)).

Entrepreneurial Ability and Entrepreneurial Behaviour

The students' attitude towards entrepreneurship is influenced by their entrepreneurial skills. The students consistently cultivate a habit of making decisions based on their entrepreneurial abilities. It empowers individuals to efficiently find resources, create strategic plans, and recognise available opportunities. These factors contribute to a culture of innovation and proactive behaviour ([Svotwa et al., 2022](#)). Having the skill to assess risk is crucial for attaining success in the business world. In addition, the development of entrepreneurship skills can greatly contribute to improving team building and leadership abilities. The study conducted by [Adeel et al. \(2023\)](#) emphasised the significant impact of entrepreneurial ability on shaping the behaviour of students in a positive manner.

Communication Ability and Entrepreneurial Behaviour

Effective communication forms the foundation of human relationships. Displaying various affirming gestures has a significant influence on an individual's social connections. Researchers have extensively examined human communication as a fundamental aspect of the entrepreneurship process across various fields ([Parhankangas & Darics, 2022](#)). Thus, it is crucial for individuals to enhance their communication skills in order to effectively influence entrepreneurial behaviour ([Kusuma et al., 2019](#)). A study conducted by [Odeh et al. \(2019\)](#) found that communication has a positive impact on the entrepreneurial behaviour of students.

Leadership Ability and Entrepreneurial Behaviour

The study of leadership in literature has consistently emphasised its influential role in shaping behaviour. Similarly, research has indicated that the leadership abilities of an individual have a substantial influence on their entrepreneurial behaviour. Being a leader involves more than just giving instructions to others. Indeed, a leader plays a crucial role in shaping the capacity and fostering innovation within individuals. They play a crucial role in the development of traits, enabling individuals to overcome various challenges. Developing entrepreneurial capability among students is a fundamental responsibility of a leader in an academic setting. In addition, the study conducted by [Man et al. \(2008\)](#)

highlighted the significant impact of leaders on the development of entrepreneurial competencies among students. In a recent study conducted by Mukesh et al. (2020), it was found that there is a positive correlation between leadership ability among students and their entrepreneurial behaviour.

Innovation Ability and Entrepreneurial Behaviour

The individual's ability to innovate fosters the capacity to create novel methods, products, and ideas. Here are the fundamental principles of entrepreneurship. The capacity for innovation is fostered within individuals, enabling them to effectively differentiate between distinct value propositions (Lounsbury et al., 2021). Prior research has highlighted the significance of innovation in influencing entrepreneurial behaviour. They suggested that innovation is crucial for fostering entrepreneurial behaviour. In addition, various studies have shown a clear connection between innovation capabilities and entrepreneurial behaviour, highlighting the positive and significant impact of innovation ability on entrepreneurial behaviour (Gundolf et al., 2017).

Mediating Roles

The students' inclination towards entrepreneurship is influenced by various environmental factors and cultural disparities. In addition, the cultural environment of the institute also has a significant impact on fostering the entrepreneurial skills of the students. The supportive culture fosters an environment where students are encouraged to think outside the box and take risks. An individual is driven to seize the opportunities based on their entrepreneurial intention (Bhatta et al., 2024).

Likewise, the study conducted by Mukhtar et al. (2021) highlights the significance of material culture in fostering entrepreneurial skills among students. In addition, the students' entrepreneurial behaviour is directly influenced by their entrepreneurial ability. The practices and behaviours are fostered by the infrastructure of the universities and initiatives launched to support the entrepreneurial spirit of the students (Sancho et al., 2022). Additionally, the cultivation of spiritual culture plays a crucial role in instilling a proactive attitude among students towards entrepreneurship. (Adu et al., 2020).

Furthermore, the culture of the students has an impact on their academic performance. The friends and family members play a significant role in the student's culture. Having a deep understanding of culture can greatly enhance one's ability to communicate effectively. The behaviour of an individual is positively influenced by their communication skills. Networking and communication play a crucial role in the success of entrepreneurs, as highlighted by Pakura et al. (2020). Additionally, the student's leadership ability can be influenced by the cultural environment. Having a strong support system of family members and friends is crucial for developing leadership skills in the future. In addition, the role models and leaders foster a sense of entrepreneurial behaviour among students (Fauzi et al., 2021). Ultimately, the culture of the institute, including its spiritual, material, and institutional aspects, plays a crucial role in shaping the students' ability to innovate (Sorenson, 2024).

On the basis of above discussion, we hypothesize that

H1: *Entrepreneurial cultural ecology impacts entrepreneurial behaviour.*

- H1a:** Material culture impacts entrepreneurial behaviour.
H1b: Behavioural culture impacts entrepreneurial behaviour.
H1c: Institutional culture impacts entrepreneurial behaviour.
H1d: Spiritual culture impacts entrepreneurial behaviour.
H2: Entrepreneurial cultural ecology impacts entrepreneurial ability.
H2a: Material culture impacts entrepreneurial ability.
H2b: Behavioural culture impacts entrepreneurial ability.
H2c: Institutional culture impacts entrepreneurial ability.
H2d: Spiritual culture impacts entrepreneurial ability.
H3: Entrepreneurial ability impacts entrepreneurial behaviour.
H3a: Entrepreneurial intention impacts entrepreneurial behaviour.
H3b: Communication ability impacts entrepreneurial behaviour.
H3c: Leadership ability impacts entrepreneurial behaviour.
H3d: Innovation ability impacts entrepreneurial behaviour.
H4: Entrepreneurial ability mediates between cultural ecology and behaviour.
H4a: Entrepreneurial intention mediates between cultural ecology and behaviour.
H4b: Communication ability mediates between cultural ecology and behaviour.
H4c: Leadership ability mediates between cultural ecology and behaviour.
H4d: Innovation ability mediates between cultural ecology and behaviour.

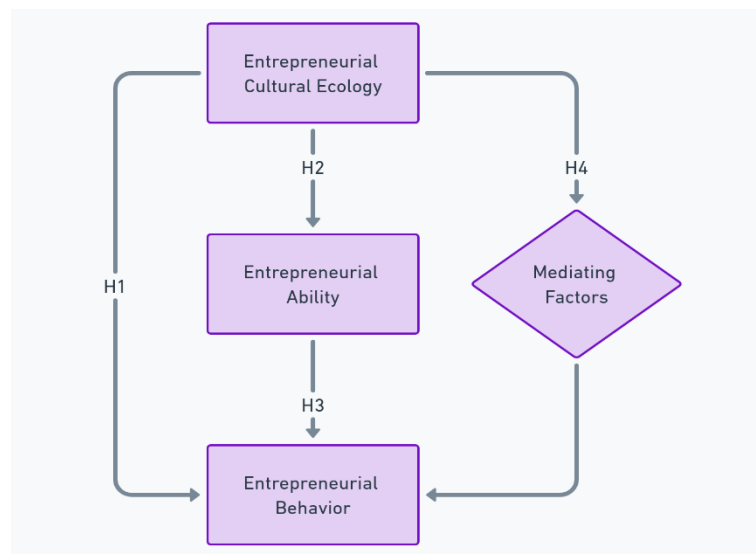


Figure 1: Conceptual Model.

Methodology

The methodology section of the research holds significant importance in validating the proposed hypothesis of the study. It is crucial to analyse and gather the data. The primary focus of this research is to investigate how the cultural ecosystem of entrepreneurship impacts the capabilities and entrepreneurial behaviour within China's higher education sector. Thus, this study utilised a combination of quantitative and qualitative methods to achieve its research goals.

Research Design

The research design of the present study incorporates both quantitative and qualitative analysis through the use of mixed methods.

Sample Selection

This study collected data from students enrolled in various colleges and universities in China. To reach the respondents of the study, this study utilised purposive sampling technique.

Data Collection

Quantitative and Qualitative Data Collection

The data is gathered from the participants through a structured questionnaire. The questionnaires were created to collect data on aspects related to entrepreneurship, such as behaviour, capabilities, and the cultural ecosystem surrounding it. A structured questionnaire was distributed to students studying entrepreneurship in selected higher education institutions. The questionnaire was created using a 5-point Likert scale. We distributed a total of 515 questionnaires among students and received back 491 completed questionnaires from the respondents. In addition, the students also provided qualitative data. The primary objective of the interviews was to collect comprehensive responses from the students. The qualitative data enhanced the findings of the quantitative data, resulting in more widely applicable and credible results.

Data Analysis

Analysing the quantitative data involved the use of statistical software, specifically SPSS. In order to achieve this objective, the present study utilised the Pearson correlation coefficient technique to analyse the quantitative data collected from the respondents. In addition, regression analysis was also conducted for this purpose. Furthermore, a thematic analysis was performed to qualitatively analyse the data. This method entailed the coding of the recurring themes that emerged from the interviews conducted with the students.

Table 1

Correlation Matrix for Study Variables

Variables	1	2	3	4	5
1. Material Culture	1				
2. Behavioral Culture	0.72**	1			
3. Institutional Culture	0.65**	0.78**	1		
4. Spiritual Culture	0.59**	0.69**	0.74**	1	
5. Entrepreneurial Ability	0.81**	0.83**	0.85**	0.80**	1
6. Entrepreneurial Behavior	0.75**	0.77**	0.79**	0.73**	0.90**

Note: **p < 0.01

The correlation matrix of the current study is presented in [Table 1](#), illustrating the relationships among the variables under investigation. The statistical findings indicate a positive correlation between material culture and all variables of the study. The correlation values range from 0.50 to 0.81, indicating a strong connection between the variables. However, behavioural culture is closely

linked to both spiritual culture and institutional culture, with correlation values of 0.69 and 0.78 respectively. Similarly, there is a significant relationship between institutional culture and spiritual culture, with a correlation value of 0.74. Ultimately, there is a strong correlation, ranging from 0.80 to 0.85, between entrepreneurial ability and cultural dimensions. The findings indicate a strong correlation between entrepreneurial ability and cultural context.

Table 2

Confirmatory Factor Analysis (CFA) Loadings

Factor	Item	Loading
Material Culture	MC1	0.74
	MC2	0.79
Behavioral Culture	BC1	0.81
	BC2	0.83
Institutional Culture	IC1	0.85
	IC2	0.88
Spiritual Culture	SC1	0.80
	SC2	0.82
Entrepreneurial Ability	EA1	0.90
	EA2	0.92
Entrepreneurial Behavior	EB1	0.87
	EB2	0.89

Note: All loadings are significant at $p < 0.001$.

Table 2 presents the results of the confirmatory factor analysis conducted on all variables and their corresponding items in the study. The observed loadings are statistically significant at a significance level of $P < 0.001$. The factor loadings of items related to material culture range from 0.70 to 0.79. The factor loading of items associated with behavioural culture ranged from 0.81 to 0.83, indicating acceptable factor loading. In addition, the items of institutional culture have factor loadings of 0.85 and 0.88, indicating that these items are acceptable at this end as well. The items of spiritual culture have an acceptable loading range of 0.80 to 0.82. The items of entrepreneurial behaviour and entrepreneurial ability exhibited factor loadings ranging from 0.87 to 0.92, indicating that these items are suitable for further analysis.

Table 3

Structural Equation Modelling (SEM) Path Coefficients

Path	Coefficient	Std. Error	CR	P Value
Material Culture → Ent. Ability	0.25	0.05	5.00	<0.001
Behavioral Culture → Ent. Ability	0.30	0.04	7.50	<0.001
Institutional Culture → Ent. Ability	0.35	0.05	7.00	<0.001
Spiritual Culture → Ent. Ability	0.20	0.05	4.00	<0.001
Ent. Ability → Ent. Behavior	0.45	0.03	15.00	<0.001

Note: CR = Critical Ratio for significance testing. All paths are significant.

Table 3 presents the structural equation modelling results, specifically the path coefficients. The statement describes the representation of the relationship between the variables being examined in the study. The Beta values indicate both the strength and direction of the variable. The culture factor exhibits a positive coefficient ranging from 0.20

to 0.35. The relationship between entrepreneurial ability and the variable has a P value of less than 0.001, indicating a significant relationship. The results indicate that all cultural dimensions have a significant impact on entrepreneurial ability. The Beta value of entrepreneurial ability is 0.45, and its P value with entrepreneurial behaviour is less than 0.001, indicating a significant relationship between the variables.

Table 4

Hypothesis Test Results with P-Value, CR, and Beta

Hypothesis ID	Hypothesis Statement	Test Outcome	P-Value	CR Beta
H1	Entrepreneurial cultural ecology impacts entrepreneurial behavior.	Supported	<0.001	4.56 0.62
H1a	Material culture impacts entrepreneurial behavior.	Supported	<0.001	3.95 0.58
H1b	Behavioral culture impacts entrepreneurial behavior.	Supported	<0.001	4.12 0.61
H1c	Institutional culture impacts entrepreneurial behavior.	Supported	<0.001	3.88 0.59
H1d	Spiritual culture impacts entrepreneurial behavior.	Supported	<0.001	4.03 0.60
H2	Entrepreneurial cultural ecology impacts entrepreneurial ability.	Supported	<0.001	5.22 0.65
H2a	Material culture impacts entrepreneurial ability.	Supported	<0.001	4.77 0.63
H2b	Behavioral culture impacts entrepreneurial ability.	Supported	<0.001	4.89 0.64
H2c	Institutional culture impacts entrepreneurial ability.	Supported	<0.001	4.66 0.62
H2d	Spiritual culture impacts entrepreneurial ability.	Supported	<0.001	4.81 0.63
H3	Entrepreneurial ability impacts entrepreneurial behavior.	Supported	<0.001	6.33 0.67
H3a	Entrepreneurial intention impacts entrepreneurial behavior.	Supported	<0.001	5.78 0.66
H3b	Communication ability impacts entrepreneurial behavior.	Supported	<0.001	5.84 0.66
H3c	Leadership ability impacts entrepreneurial behavior.	Supported	<0.001	5.92 0.67
H3d	Innovation ability impacts entrepreneurial behavior.	Supported	<0.001	5.69 0.65
H4	Entrepreneurial ability mediates between cultural ecology and behavior.	Supported	<0.001	5.47 0.64
H4a	Entrepreneurial intention mediates between cultural ecology and behavior.	Supported	<0.001	5.11 0.63
H4b	Communication ability mediates between cultural ecology and behavior.	Supported	<0.001	5.35 0.64
H4c	Leadership ability mediates between cultural ecology and behavior.	Supported	<0.001	5.22 0.63
H4d	Innovation ability mediates between cultural ecology and behavior.	Supported	<0.001	5.27 0.64

The results of the study indicate significant relationships among the variables under investigation. The hypothesis has a CR value ranging from 3.88 to 5.22. The values demonstrate support for the proposed hypothesis. The study's beta values range from 0.58 to 0.67, indicating the strength and direction of the relationship. The relationship proposed earlier is considered to be statistically significant with a P value of less than 0.001. The statistical data demonstrates a significant relationship between all cultural factors and

entrepreneurial behaviour, thus supporting the proposed hypothesis. Furthermore, there is a significant positive relationship between entrepreneurial ability and entrepreneurial behaviour, with a CR value of 6.33 and a P value of less than 0.001, providing support for the hypothesis. The mediating variables have statistically significant P values (<0.001), indicating their role as mediators.

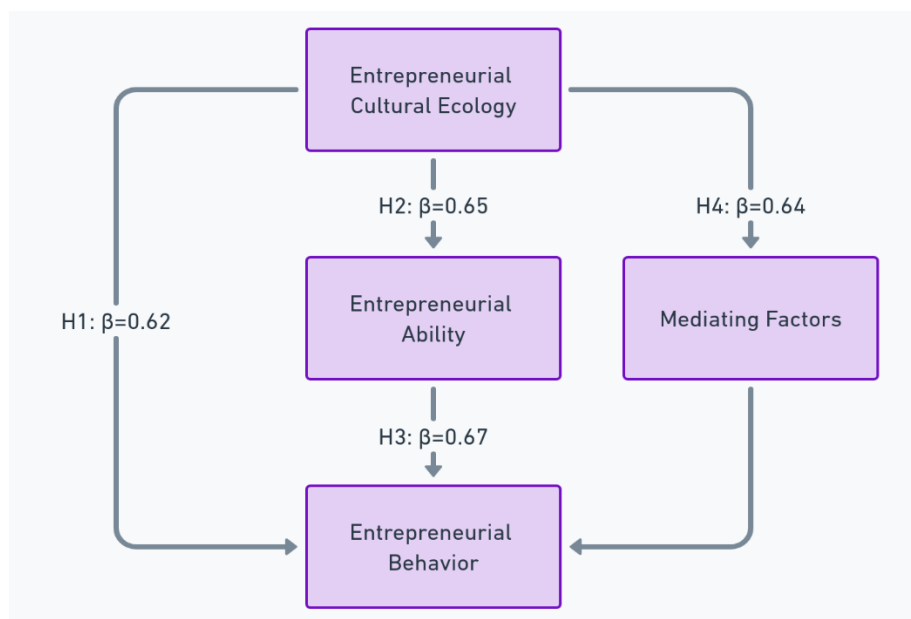


Figure 2: Hypotheses Results.

Discussion

The main objective of the present study was to examine the effect of entrepreneurial cultural ecology on entrepreneurial behavior through mediation of entrepreneurial ability. The data of the study was gathered from students of colleges and universities from China. The analysis of the study was based on quantitative and qualitative aspects. The findings of the study revealed that entrepreneurial culture and its factors have significant effect on entrepreneurial ability. These results are in line with the findings of Ruiz (2021) as well who revealed same findings in their study. There can be a number of reasons for these findings in the present context. The possible reason for these findings is that the supportive culture by the institutes positively shapes entrepreneurial culture within the institute. Educational institutions that promote innovation and risk-taking among students play a crucial role in fostering an entrepreneurial culture. The material culture, behavioural culture, spiritual culture, and institutional culture of the institute have a significant positive effect on the entrepreneurial behaviour of the students. According to the respondents, the presence of infrastructure as a form of material culture serves as a motivation for studying entrepreneurship and taking risks. Furthermore, the incorporation of religious teachings and spiritualism is crucial in fostering entrepreneurial behaviour. These students may be inclined to initiate their own business and embrace risk-taking in the future.

The entrepreneurial behaviour of students is positively influenced by the entrepreneurial culture and its dimensions. The present findings align with those reported by [Lin et al. \(2023\)](#) in previous research. The study participants expressed the view that cultural factors of students play a crucial role in shaping their behaviour. The students' attitude is influenced by spiritual, institutional, and material culture. Students are more likely to engage in investment and risk-taking behaviours when they receive encouragement from their friends and family. Furthermore, the infrastructure and support provided by the university play a crucial role in shaping individuals' behaviour. The study's findings indicate that the university's initiatives effectively promote students' development of entrepreneurial attitudes and behaviours. The curricula facilitate students' comprehension of entrepreneurship and encourage their active involvement in the innovation process.

The study's findings provide evidence that there is a strong connection between entrepreneurial intention and entrepreneurial behaviour. Having a clear intention is essential for guiding our actions. Similarly, in this case, individuals who are interested in starting a new venture tend to exhibit positive behaviour towards entrepreneurship. Similarly, individuals with strong communication abilities tend to excel in the business world. They have the ability to effectively communicate business-related matters to stakeholders. In addition, the study's participants strongly believe that leadership plays a crucial role in influencing the entrepreneurial behaviour of students enrolled in Chinese universities. Since leaders serve as role models, students often look up to them and emulate their behaviour. Thus, they are strongly motivated to embark on their own business endeavour with the guidance of experienced individuals.

Conclusion

This study examines the impact of entrepreneurial abilities and culture on student attitudes towards entrepreneurship by surveying a group of Chinese students. In order to achieve our objective, we decided to use a mixed method approach. The quantitative data was analysed using SPSS through the application of regression and correlation techniques. The qualitative data was analysed through thematic analysis, focusing on the recurring themes that emerged from the interviews with the participants. There are limited conclusions that can be derived from the study's findings.

The study's findings emphasise the importance of fostering an entrepreneurial cultural ecology to enhance the entrepreneurial behaviour of students. The findings of the study indicate that it is crucial for universities to provide support to students, enabling them to develop a mindset that embraces taking risks in their future endeavours. Universities should focus on fostering a well-rounded environment that enhances students' behaviour through spiritual, institutional, and material aspects. The research findings highlight the importance of entrepreneurial capabilities in shaping the behaviour of students. It is crucial for universities and other institutions to prioritise the development of students' knowledge and skills, enabling them to pursue entrepreneurship.

The research findings further validate the significance of material culture in enhancing students' capabilities and behaviour in relation to entrepreneurship. These findings indicate the importance of institutions prioritising the creation of spaces and infrastructure that foster and encourage entrepreneurial activities and behaviour among students. Additionally, it is important for educators to prioritise spiritual activities and assume

leadership roles. This will allow students to be inspired by their role models and cultivate the desire to pursue their own ventures in the future. These activities can greatly contribute to fostering a mindset of innovation and risk-taking among students.

Implications, Limitations and Future Directions

There are several constraints in the current study. The sample selected for this study consists of students enrolled in universities and colleges in China. It is recommended that a sample for a future study of the same nature could be selected from either colleges or universities. However, the R square value of the results indicates that there may be additional variables that could enhance the influence of the independent variables on the outcome variables. In addition, this study employed a combination of research methods to gather and analyse the data. In order to gain a more comprehensive understanding of the respondents' opinions, future studies may opt for a qualitative approach exclusively. Ultimately, the study utilises SPSS as the tool for conducting quantitative analysis. In the future, researchers may choose to utilise advanced tools such as smart PLS 4 or AMOS for their analysis needs.

This research has significant implications for both theory and practice. This study is one of the first to examine the entrepreneurial ecology and its four dimensions as a predictor in a single framework. In addition, this study addresses the lack of research on the mediating effect of entrepreneurial ability. In addition, this study employed a combination of research methods to achieve its goals. In previous studies, researchers have commonly employed either quantitative or qualitative methods to examine the impact of various factors on entrepreneurial behaviour. In this study, we aim to expand the existing literature by examining how entrepreneurial ability and entrepreneurial cultural ecology influence the entrepreneurial behaviour of students.

This research emphasises the importance of entrepreneurs enhancing their behaviour in terms of managerial implications. The study's findings can be utilised by decision makers to enhance the entrepreneurial behaviour of students. It is important to prioritise the spiritual aspect, improve the institute's infrastructure, and enhance leadership qualities to enable students to fully engage in entrepreneurial ventures. This study has the potential to make a valuable contribution to enhancing job creation on a national scale. By fostering the growth of new ventures, more employment opportunities can be generated for students.

References

- Acs, Z. J., Estrin, S., Mickiewicz, T., & Szerb, L. (2018). Entrepreneurship, institutional economics, and economic growth: an ecosystem perspective. *Small Business Economics*, 51, 501-514. <https://doi.org/10.1007/s11187-018-0013-9>
- Adeel, S., Daniel, A. D., & Botelho, A. (2023). The effect of entrepreneurship education on the determinants of entrepreneurial behaviour among higher education students: A multi-group analysis. *Journal of Innovation & Knowledge*, 8(1), 100324. <https://doi.org/10.1016/j.jik.2023.100324>
- Adekiya, A. A., & Ibrahim, F. (2016). Entrepreneurship intention among students. The antecedent role of culture and entrepreneurship training and development. *The international journal of management education*, 14(2), 116-132. <https://doi.org/10.1016/j.ijme.2016.03.001>
- Adu, I. N., Boakye, K. O., Suleman, A.-R., & Bingab, B. B. B. (2020). Exploring the factors that mediate the relationship between entrepreneurial education and entrepreneurial

- intentions among undergraduate students in Ghana. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(2), 215-228. <https://doi.org/10.1108/APJIE-07-2019-0052>
- Ayob, A. H. (2021a). Entrepreneurship education, institutions and student entrepreneurship: a cross-country analysis. *Compare: A Journal of Comparative and International Education*, 51(5), 745-763. <https://doi.org/10.1080/03057925.2019.1673701>
- Ayob, A. H. (2021b). Institutions and student entrepreneurship: the effects of economic conditions, culture and education. *Educational Studies*, 47(6), 661-679. <https://doi.org/10.1080/03055698.2020.1729094>
- Badri, R., & Hachicha, N. (2019). Entrepreneurship education and its impact on students' intention to start up: A sample case study of students from two Tunisian universities. *The International Journal of Management Education*, 17(2), 182-190. <https://doi.org/10.1016/j.ijme.2019.02.004>
- Bhatta, D. D., Pi, Y., Sarfraz, M., Jaffri, Z. U. A., Ivascu, L., & Ozturk, I. (2024). What determines the entrepreneurial intentions of employees? A moderated mediation model of entrepreneurial motivation and innovate work behavior. *Heliyon*, 10(2), e24678. <https://doi.org/10.1016/j.heliyon.2024.e24678>
- Bienkowska, D., Klofsten, M., & Rasmussen, E. (2016). PhD students in the entrepreneurial university-perceived support for academic entrepreneurship. *European Journal of Education*, 51(1), 56-72. <https://doi.org/10.1111/ejed.12160>
- Boldureanu, G., Ionescu, A. M., Bercu, A.-M., Bedrule-Grigoruță, M. V., & Boldureanu, D. (2020). Entrepreneurship education through successful entrepreneurial models in higher education institutions. *Sustainability*, 12(3), 1267. <https://doi.org/10.3390/su12031267>
- Bonesso, S., Gerli, F., Pizzi, C., & Cortellazzo, L. (2018). Students' entrepreneurial intentions: the role of prior learning experiences and emotional, social, and cognitive competencies. *Journal of Small Business Management*, 56, 215-242. <https://doi.org/10.1111/jsbm.12399>
- Cao, Y., Asad, M. M., Wang, L., Naz, A., & Almusharraf, N. (2022). Role of personality traits for entrepreneurial intentions of young entrepreneurs: A case study of higher education institution. *Frontiers in psychology*, 13, 1010412. <https://doi.org/10.3389/fpsyg.2022.1010412>
- Çelikkol, M., Kitapçı, H., & Döven, G. (2019). Culture's impact on entrepreneurship and interaction effect of economic development level: An 81 country study. *Journal of Business Economics and Management*, 20(4), 777-797. <https://doi.org/10.3846/jbem.2019.10180>
- Clevenger, M. R., & Miao, C. (2022). An ecology of entrepreneurship: A review of concepts, entrepreneurial ecosystems, and entrepreneurial communities from the literature. *Entrepreneurial Communities and Ecosystems*, 56-99. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781351045711-3/ecology-entrepreneurship-morgan-clevenger-chao-miao>
- Dwi, M., Maskuri, M., & Ghony, M. J. (2024). The Role of the Entrepreneurial Spirit in Developing Multicultural Islamic Education. *International Journal of Innovation, Creativity and Change*, 18(1), 90-119. https://awww.ijicc.net/images/Vol_18/17220_Dwi_2024_E_R.pdf
- Dye, B. G. (2019). "What Can I Possibly Achieve As A Necessity-Driven Entrepreneur?" *The Impact Of The Cultural Component Of The Entrepreneurial Ecology On Possible Future Entrepreneur Selves* University of Leicester. <https://doi.org/10.25392/leicester.data.10319627.v1>
- Elnadi, M., & Gheith, M. H. (2021). Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia. *The International Journal of Management Education*, 19(1), 100458.

- <https://doi.org/10.1016/j.ijme.2021.100458>
- Fauzi, M. A., Martin, T., & Ravesangar, K. (2021). The influence of transformational leadership on Malaysian students' entrepreneurial behaviour. *Entrepreneurial business and economics review*, 9(1), 89-103. <https://doi.org/10.15678/EBER.2021.090106>
- Ganzin, M., Islam, G., & Suddaby, R. (2020). Spirituality and entrepreneurship: The role of magical thinking in future-oriented sensemaking. *Organization studies*, 41(1), 77-102. <https://doi.org/10.1177/0170840618819035>
- Gundolf, K., Gast, J., & Géraudel, M. (2017). Startups'innovation Behaviour: An Investigation Into the Role of Entrepreneurial Motivations. *International Journal of Innovation Management*, 21(07), 1750054. <https://doi.org/10.1142/S1363919617500542>
- Idi, K. I. A., & Germinah, C.-T. E. (2022). Venture Capital Financing as A Driver for Entrepreneurship Development in Africa. A Literature Review and Future Research Agenda. *IJEBD (International Journal of Entrepreneurship and Business Development)*, 5(6), 1183-1198. <https://doi.org/10.29138/ijebd.v5i6.2048>
- Jovanović, M., Jevtić, M., & Petković, J. (2018). The Role of Culture in Entrepreneurial Ecosystem: What Matters Most? In *16th International Symposium Symorg 2018 – Doing Business in the Digital Age: Challenges, Approaches and Solutions* (pp. 1-9). symorg.
- Khadhraoui, M., Plaisent, M., Lakhal, L., & Bernard, P. (2016). The impact of entrepreneurial culture dimensions on entrepreneurial intention: a cross cultural study. *Universal Journal of Management*, 4(12), 685-693. <https://doi.org/10.13189/ujm.2016.041205>
- Kiradoo, G. (2021). Competency-Based Learning: An Imperative Benchmark for Result Engendering Entrepreneurship Education. *Turkish Journal of Computer and Mathematics Education (Turcomat)*, 12(2), 2781-2786. <https://turcomat.org/index.php/turkbilmat/article/view/2307>
- Kritikos, A. S. (2022). Personality and entrepreneurship. In *Handbook of Labor, Human Resources and Population Economics* (pp. 1-20). https://doi.org/10.1007/978-3-319-57365-6_305-1
- Kusuma, S., Hubeis, A., Sarwoprasodjo, S., & Ginting, B. (2019). Communication performance and entrepreneurial behavior in village-owned enterprise in managing village enterprise: a case study of Panggungharjo village of Bantul city, Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 94(10), 41-50. <https://doi.org/10.18551/rjoas.2019-10.06>
- Kusumawijaya, I. K. (2020). Understanding entrepreneurial intention: the prediction of entrepreneurial behavior. *International Review of Management and Marketing*, 10(4), 35-42. <https://pdfs.semanticscholar.org/246f/fb5c7c442ac4dcf33a84d90ffa9c43429d1f.pdf>
- Li, Z., Zhou, X., Jung, S., & Li, J. (2020). China's 40-year road to innovation. *Chinese Management Studies*, 14(2), 335-357. <https://doi.org/10.1108/CMS-01-2019-0019>
- Lihua, D. (2022). An extended model of the theory of planned behavior: an empirical study of entrepreneurial intention and entrepreneurial behavior in college students. *Frontiers in psychology*, 12, 627818. <https://doi.org/10.3389/fpsyg.2021.627818>
- Lin, S., De-Pablos-Heredero, C., Botella, J. L. M., & Lian, C. L. (2023). Influence of entrepreneurship education on the entrepreneurial intention of Chinese students enrolled at universities in the Community of Madrid. *IEEE Access*, 11, 63678 - 63689. <https://doi.org/10.1109/ACCESS.2023.3284970>
- Liu, X., Schwaag Serger, S., Tagscherer, U., & Chang, A. Y. (2017). Beyond catch-up – can a new innovation policy help China overcome the middle income trap? *Science and Public Policy*, 44(5), 656-669. <https://doi.org/10.1093/scipol/scw092>

- Lounsbury, M., Cornelissen, J., Granqvist, N., & Grodal, S. (2021). Culture, innovation and entrepreneurship. In *Culture, Innovation and Entrepreneurship* (pp. 1-12). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003121749-1>
- Lv, Y., Chen, Y., Sha, Y., Wang, J., An, L., Chen, T., Huang, X., Huang, Y., & Huang, L. (2021). How entrepreneurship education at universities influences entrepreneurial intention: Mediating effect based on entrepreneurial competence. *Frontiers in psychology*, 12, 655868. <https://doi.org/10.3389/fpsyg.2021.655868>
- Magomedova, N., Villaescusa, N., & Manresa, A. (2023). Exploring the landscape of University-affiliated venture funds: an archetype approach. *Venture Capital*, 25(3), 317-349. <https://doi.org/10.1080/13691066.2022.2163001>
- Man, T. W., Lau, T., & Snape, E. (2008). Entrepreneurial competencies and the performance of small and medium enterprises: An investigation through a framework of competitiveness. *Journal of Small Business & Entrepreneurship*, 21(3), 257-276. <https://doi.org/10.1080/08276331.2008.10593424>
- Mavlutova, I., Lešinskis, K., Hermanis, J., & Krastiņš, M. (2019). Development of entrepreneurial mindset and improvement of student's business idea viability through innovative teaching methods in higher education. *Strategica*, 1-11. <https://strategica-conference.ro/wp-content/uploads/2022/04/23.pdf>
- McIver, K. A. (2016). Material culture: consumption, collecting and domestic goods. In *The Ashgate Research Companion to Women and Gender in Early Modern Europe* (pp. 469-488). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315613765-27>
- Miço, H., & Cungu, J. (2023). Entrepreneurship education, a challenging learning process towards entrepreneurial competence in education. *Administrative Sciences*, 13(1), 22. <https://doi.org/10.3390/admsci13010022>
- Morris, M. H., Shirokova, G., & Tsukanova, T. (2017). Student entrepreneurship and the university ecosystem: A multi-country empirical exploration. *European Journal of International Management*, 11(1), 65-85. <https://doi.org/10.1504/EJIM.2017.081251>
- Mukesh, H., & Rajasekharan Pillai, K. (2020). Role of institutional ecosystem in entrepreneurship education: An empirical reiteration. *The Journal of Entrepreneurship*, 29(1), 176-205. <https://doi.org/10.1177/0971355719893521>
- Mukhtar, S., Wardana, L. W., Wibowo, A., & Narmaditya, B. S. (2021). Does entrepreneurship education and culture promote students' entrepreneurial intention? The mediating role of entrepreneurial mindset. *Cogent Education*, 8(1), 1918849. <https://doi.org/10.1080/2331186X.2021.1918849>
- Odewale, G., Abd Rani, S., Migiro, S., & Adeyeye, O. (2019). Does communication skills matter to a nascent entrepreneur? *Journal of Contemporary Management*, 16(1), 209-225. <https://hdl.handle.net/10520/EJC-1583539c2a>
- OGBARI, M. E. (2023). Exploring The Influence of Entrepreneurial Abilities on Graduates' Risk-Taking Readiness. *Journal of Entrepreneurial and Business Diversity*, 1(1), 59-71. <https://doi.org/10.38142/jebd.v1i1.56>
- Osorio, A. E., Settles, A., & Shen, T. (2017). Does family support matter? The influence of support factors on entrepreneurial attitudes and intentions of college students. *Academy of Entrepreneurship Journal*, 23(1), 24-43. <https://doi.org/10.5465/AMBPP.2017.10901abstract>
- Pakura, S., Rudeloff, C., Bekmeier-Feuerhahn, S., & Eggers, F. (2020). Communication management of start-ups: an empirical analysis of entrepreneurs' communication and networking success on Facebook. *International Journal of Entrepreneurial*

- Venturing*, 12(5), 459-489. <https://doi.org/10.1504/IJEV.2020.111538>
- Parhankangas, A., & Darics, E. (2022). Language and communication in entrepreneurship research. In *Language Awareness in Business and the Professions* (pp. 39-61). Cambridge University Press. <https://doi.org/10.1017/9781108696159.006>
- Ruiz, V. E. (2021). *The Rhetoric of Everyday-Entrepreneurship: Reframing Entrepreneurial Identity & Citizenship* (Purdue University). <https://docs.lib.purdue.edu/dissertations/AAI30505499/>
- Sancho, M. P. L., Ramos-Rodriguez, A. R., & Vega, M. d. I. A. F. (2022). The influence of university entrepreneurship-oriented training in the transformation of intentions into new businesses. *The International Journal of Management Education*, 20(2), 100631. <https://doi.org/10.1016/j.ijme.2022.100631>
- Segaf, S. (2022). Moslempreneurship: Nurturing the entrepreneurial behaviour of Islamic Boarding School students in Indonesia. *Journal of Positive School Psychology*, 6(5), 1936-1944. <https://journalppw.com/index.php/jpsp/article/view/6221>
- Sorenson, G. D. (2024). The Culture of Innovation in Seminaries and Institutes of Religion: A Phenomenological Study. *Liberty University*, 1-155. <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=6330&context=doctoral>
- Spigel, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship theory and practice*, 41(1), 49-72. <https://doi.org/10.1111/etap.12167>
- Svotwa, T. D., Jaiyeoba, O., Roberts-Lombard, M., & Makanyeza, C. (2022). Perceived access to finance, entrepreneurial self-efficacy, attitude toward entrepreneurship, entrepreneurial ability, and entrepreneurial intentions: A Botswana youth perspective. *Sage Open*, 12(2), 21582440221096437. <https://doi.org/10.1177/21582440221096437>
- Turner, T., & Gianiodis, P. (2018). Entrepreneurship unleashed: Understanding entrepreneurial education outside of the business school. *Journal of Small Business Management*, 56(1), 131-149. <https://doi.org/10.1111/jsbm.12365>
- Urbano, D., Audretsch, D., Aparicio, S., & Noguera, M. (2020). Does entrepreneurial activity matter for economic growth in developing countries? The role of the institutional environment. *International Entrepreneurship and Management Journal*, 16(3), 1065-1099. <https://doi.org/10.1007/s11365-019-00621-5>
- Valencia-Arias, A., Arango-Botero, D., & Sánchez-Torres, J. A. (2022). Promoting entrepreneurship based on university students' perceptions of entrepreneurial attitude, university environment, entrepreneurial culture and entrepreneurial training. *Higher Education, Skills and Work-Based Learning*, 12(2), 328-345. <https://doi.org/10.1108/HESWBL-07-2020-0169>
- Wang, X., Sun, X., Liu, S., & Mu, C. (2021). A preliminary exploration of factors affecting a university entrepreneurship ecosystem. *Frontiers in Psychology*, 12, 732388. <https://doi.org/10.3389/fpsyg.2021.732388>
- Wu, J., Si, S., & Yan, H. (2022). Reducing poverty through the shared economy: Creating inclusive entrepreneurship around institutional voids in China. *Asian Business & Management*, 21(2), 155-183. <https://doi.org/10.1057/s41291-020-00113-3>