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ENTREPRENEURSHIP COMPETENCY MODEL FOR POLITICS AND LAW MAJORS: A SYSTEMATIC LITERATURE REVIEW

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Abstract:

In terms of the clarification of the entrepreneurship competency, many entrepreneurship competency models have been built up focusing on what the specific competencies should be included and cultivated. Regarding the heterogeneity in the entrepreneurship competency models in different levels of teaching institutions and for different majors, an in-depth systematic literature review (SLR) of the entrepreneurship competency model from the year 2013 to 2023 was conducted with the purpose to identify the entrepreneurship competencies and construct a conceptual entrepreneurship competency model conform to the characteristics of vocational colleges of political science and law. Pre-defined review protocol with keywords searching strategy and the inclusion/exclusion criteria for the review are clearly established during the review of the databases. After carefully selection process, thirteen out of 893 articles that met the inclusion-exclusion measures were selected for this SLR. Preferred Reporting Items for Systematic reviews and Meta-Analyses Statement (PRISMA) are demonstrated in the literature review reporting. This review serves the aim of presenting state of the study results, based on which a conceptual entrepreneurship competency model including aspects of knowledge, skill, thinking ability, personality and humanistic quality is identified and proposed for the politics and law majors.

Keywords:

Entrepreneurship Competency, Entrepreneurship Competency Model, Systematic Literature Review, Meta- Analysis, Politics And Law Majors

Introduction

The concept and the practice of the entrepreneurship education first originated in western countries believing it a significant driving force for worldwide economic development, scientific and technological progress and job creation. Entrepreneurship education, entrepreneurship programs and their function and efficacy in promoting entrepreneurship have drawn considerable attention and increasing academic interest over the last decades (Cho et al., 2018; Oehler et al., 2015; Santos, 2011; Sarooghi et al., 2019). Accordingly, the fast-growing number of entrepreneurship courses in the academic teaching and training worldwide led to a high variety of educational goals, teaching methods and evaluation approaches (Purzer et al., 2016). Entrepreneurship education is focused on the shaping of the entrepreneurial spirit and the nourishment of entrepreneurship competency. Entrepreneurship is recognized as a key competency for lifelong learning, an essential element for all citizens in a knowledge-based society (Keohane et al., 2018), as well as an important potential to improve the future well-being of each learner (OECD, 2019; OECD., 2018). Given the importance of entrepreneurship, both developed and developing countries have adopted campaign measures to strengthen their national entrepreneurial status (Klofsten et al., 2019).

The view of that entrepreneurs should have good entrepreneurship competency is regarded as the premise for achieving successful entrepreneurship. As potential future entrepreneurs, what competencies students should have to successfully start a business has been a hot topic. In reviewing the entrepreneurship-related articles in Scopus and WOS in the past ten years, it was noted that a major portion of the articles were devoted to case studies and projects aimed at developing entrepreneurship competency in multilevel institutions. Entrepreneurship competency models have been developed in the EU, the UK, the Nordic countries and the US (Bacigalupo et al., 2016; Rasmussen et al., 2016). Different organizations and authors have put forward different definitions and dimensions for entrepreneurial competencies.

Hebei Vocational College of Political Science and Law is a special existence in China with the training goal of cultivating political and legal talents for grassroots, the quality requirements and the talent training standard are different from those majors in other universities or any other vocational colleges. As one part of the vocational colleges, it is also involved in the inevitable wave of combination of vocational education with entrepreneurship education. The talent training of vocational colleges of political science and law is more on the political and law system and modern service industry. There is almost no business related major. For politics and law majors, students who even do not see themselves as business-related entrepreneurs (Jansen, 2010). The attention of the entrepreneurship competency cultivation is paid to students' political and legal knowledge application competency, and the lacking of technical support for entrepreneurship makes the entrepreneurial competency cultivation difficult to find the entry point. The problem is that there isn't a set of entrepreneurship competency training model in line with their own characteristics, the entrepreneurship competency cultivation is still in the context of the business nature. Therefore, classification of an entrepreneurship competency model conform to the characteristics of vocational colleges of political science and law is desirable.

There are diversified entrepreneurial competencies, however, the type of competency that significantly enforce the success of individuals or groups varies according to the types of the sector studied (Yerdelen-Damar et al., 2017). Hence, investigating and selecting the most indispensable dimensions specific to the political and legal sector is important. Clarity about

exact entrepreneurship competencies is considered to be the first step in order to provide a sound basis for the scientific design and implementation of entrepreneurship competency cultivation courses and programs. As a result, the literature review is to look into core entrepreneurial competencies and construct a conceptual entrepreneurship competency model that could help politics and law majors in their entrepreneurship practice.

The demand for a construction of a conceptual entrepreneurship competency model for politics and law majors requires a sufficient literature review. This study was conducted to observe the previous study on the entrepreneurship competency model, and based on which to identify the entrepreneurship competencies that are more important for politics and law majors.

Purpose of the Review

The main objective of the review is to graph out the previous study on entrepreneurship competency model. The systematic literature review (SLR) is a consolidated reflection and integration of the scientific search with the aim to find answers to the research questions, which were formulated under a systematic and precise process.

1. What are the previous studies on entrepreneurship competency models?
2. What are the findings of the research on entrepreneurship competency models?

In line with the above research questions, specific objectives of the study are addressed as below:

1. To review articles on the entrepreneurship competency models.
2. To summarize the findings and identify the entrepreneurship competencies that are more important for politics and law majors.

The systematic literature reviews, meta-analyses (PRISMA) model and the research questions presented in this paper provide a reference to these preferred reporting terms or phrases mentioned above. The exact review sequence and the writing pattern will be illustrated in the following sector.

Methodology

The study is a systematic literature review (SLR) taking the guidelines by (B. Kitchenham, 2004). Under a set of rules, by summarizing, analyzing, and synthesizing the data obtained from the findings, the breadth and depth of the existent research or the frontier of a certain field can be identified (Xiao et al., 2019), based on which the research questions can be figured out and gaps to explore or future research directions in a said area can be justified (Torres-Carrión et al., 2018).

There are three important phases of a good systematic literature review as stated by (Brereton et al., 2007) and (B. A. Kitchenham, 2012): planning the review, conducting the review, and reporting the review. In the planning stage for this study, the exact research purpose, the specified research questions and the review protocol were identified respectively. After the primary studies were selected during the conducting review stage, emphasis was put on extracting, analyzing, and synthesizing the obtained data. Then at last it turns into the stage of reporting the review, the literature review findings were reported comprehensively. Figure 1 shows the process of systematic literature review.

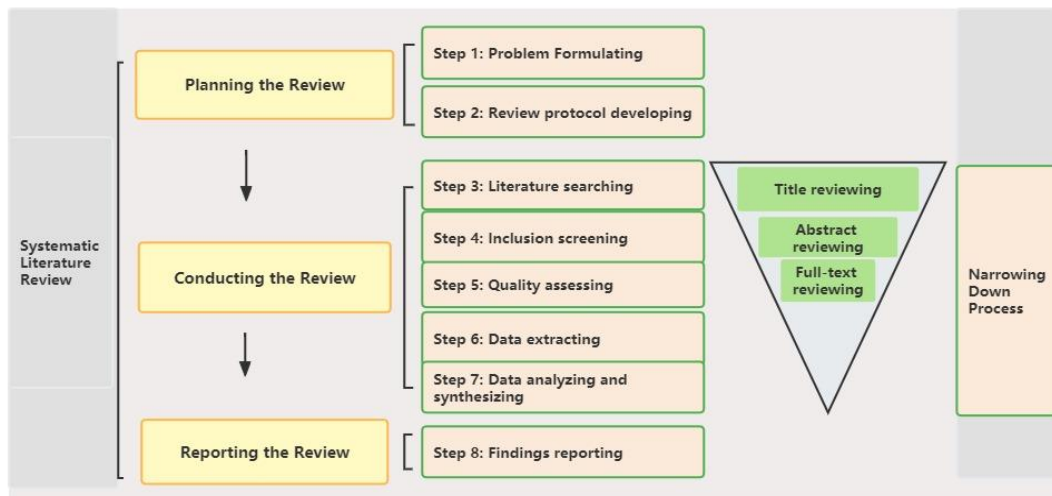


Figure 1: The Process of Systematic Literature Review

One of the key elements in most of the systematic literature review is the statistical synthesis of the data, which is also named as meta-analysis (Borenstein et al., 2021). It is used to combine the results of studies identified using systematic review methodology and to give a pooled results of the research questions (Nightingale, 2009).

The review of this study utilized the Preferred Reporting Items for Systematic reviews and Meta-Analyses Statement (PRISMA), which is the most commonly used reporting guidelines in systematic reviews (Moher et al., 2009).

Literature Search and Evaluation

As for the stage of conducting the review, information in each step is illustrated in detail as below:

Inclusion Criterion

The purpose of this study is to get a comprehensive understanding of the entrepreneurship competency models. Only studies that focus on the entrepreneurship competency model were included. Literature reviews on a specific entrepreneurship competency and papers written in non English were excluded. The publication date is limited from the year of 2013 to 2023.

Literature Identification

A search strategy was designed to find relevant papers for this systematic review: entrepreneurship competency. The search starts with the keywords “entrepreneurial competence,” “entrepreneurship competency”, “entrepreneurship framework,” and “entrepreneurship scale”. Two frequently used databases by researchers for educational multidisciplinary research that covering various disciplines are referred to: Scopus and Web of Science(WOS). Journals, reviews, books and conferences were all included in this study. Preliminary relevance were determined by title, from which to check whether the potential content is related to entrepreneurship competency or not. A total of 44 articles were listed from the search on Scopus and 849 records on WOS. By tile reviewing there are altogether 68 potential studies left from the two sources including seven duplicates which were excluded later.

Screening for Inclusion

Abstracts were then obtained for further exploration and evaluation. Abstracts of the 68 articles were reviewed to further check the relevance to the research topic—the entrepreneurship competency model. A total of 28 studies were selected during this step.

Quality and Eligibility Assessment

Eventually, the full-text articles are obtained for quality assessment. Through skimming of the full-text articles, journal articles and books published by reputable publishers with well-cited references are deemed as high-quality studies, and are included in the review. At the same vein, technical reports and on-line presentations are not taken into the inclusion due to the lack of peer-review process. After careful review, a total of fifteen studies were excluded: seven were excluded for duplicates; two was excluded because it was not written in English; five studies were excluded because they reviewed a specific entrepreneurship competency, and another one was excluded for not finding its full text. Overall, thirteen studies from the initial search were included in the stage of full-text analysis.

Data Extraction and Analysis

These selected articles were investigated to determine the study's objectives. From each article, information in regard to entrepreneurship competency model are extracted and analyzed on the following three aspects: (1) the objects and contents of the entrepreneurship competency model; (2) the methodology of the entrepreneurship competency modeling and (3) the findings and limitations. Attention to the three aspects continues throughout the whole systematic literature process. Figure 2 shows the exact data in the literature searching process.

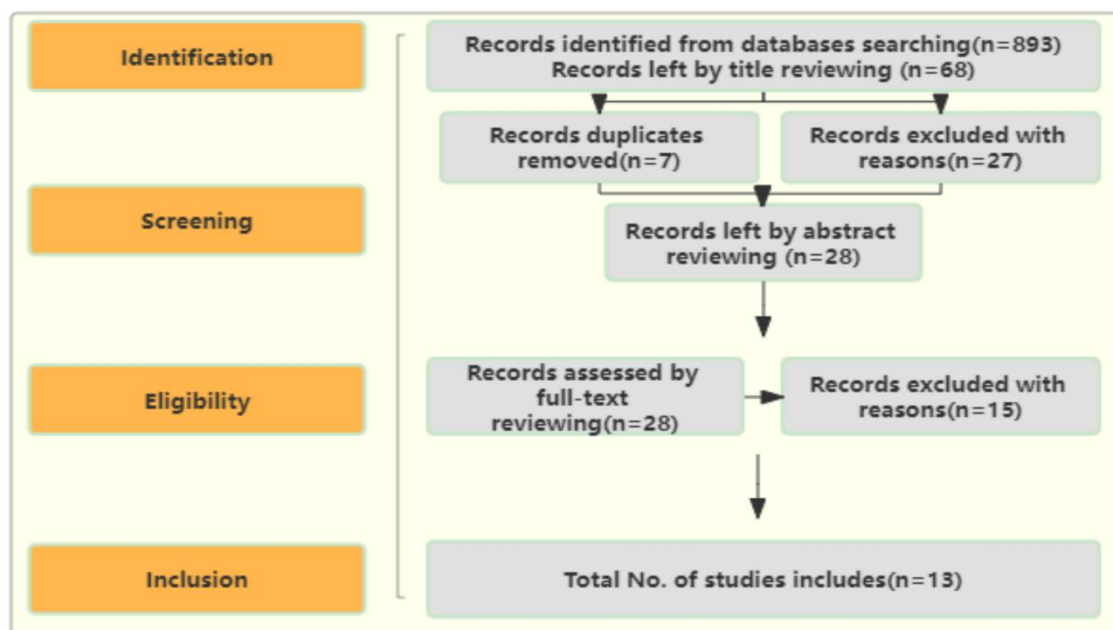


Figure 2: PRISMA Flowchart of the Literature Review

Then information of each article was consolidated into a table to guide the review. The next sector is a review of the searching findings and discussion of the results. A summary of the studies that were reviewed is shown in Table 1.

Table 1: A Summary of the Studies that were Reviewed

Author	Title	Country	Journal of the Study	M	P	Findings with highlights	Limitation
(Baczyńska et al., 2016)	Proposed Core Competencies and Empirical Validation Procedure in Competency Modeling: Confirmation and Classification	Poland	Frontiers in psychology	QN	636	The article presents a theoretical model of core competencies consisting of two main higher-order competencies called performance and entrepreneurship and proposed a two-step empirical validation procedure to very the model.	It is needed to verify the core competency model in different groups and cultures
(Baczyńska et al., 2016)	EntreComp: The Entrepreneurship Competence Framework	Europe	Publication Office of the European Union	M		It presents a complete reference framework for Entrepreneurship Competence (EntreComp), which consists of 3 competence areas, 15 competences, an 8-level progression model and a comprehensive list of 442 learning outcomes.	The framework has not yet been adapted to or tested in real settings.
(RezaeiZadeh et al., 2017)	Core Entrepreneurial Competencies and their Interdependencies	Iran and Ireland	International Entrepreneurship and Management Journal	QL	21	By identifying and rank ordering analyzing the interdependencies, the study indicated that productive thinking, motivation, interpersonal skills and leadership are core entrepreneurial competences	It is limited to one cultural context
(Ferrerás-García et al., 2021)	Developing entrepreneurial competencies in higher education: a structural model approach	Spain	Emerald Publishing	QN	337	The framework proposed establishes a bridge between the different typologies of competencies in order to foster entrepreneurial learning and in last term the connection between the worlds of education and work as regards entrepreneurship as a competence..	It only considers one subject & the study has been analyzed from the student perspective, however, it might also be assessed from the perspective of tutors.

(Foucrier et al., 2019)	A Process-Oriented Framework of Competencies for Sustainability Entrepreneurship	USA	SUSTAINABILITY	QL	0	This study presents a framework of process-oriented competencies (knowledge/skills/attitudes) the sustainability entrepreneurs would ideally possess.	It needs empirical validation through empirical studies on programs and courses
(Capella-Peris et al., 2020)	Development and Validation of a Scale to Assess Social Entrepreneurship Competency in Higher Education	Spain	Journal of Social Entrepreneurship	QN	497	This paper proposes an instrument to assess social entrepreneurship competency in higher education (SECS).	It is mainly focused on the educational field. Future research should apply the validated instrument in practice.
(Silveyra et al., 2021)	Model of Teachable Entrepreneurship Competencies (M-TEC): Scale development	Mexico	The International Journal of Management Education	QN	562	A scale of entrepreneurial competencies formed by nine types of competencies classified in four dimensions that are teachable: entrepreneurship, management and business, human resources and personal competencies.	It is difficult to apply it in some other contexts & empirical analyses limit the generalization of the results.
(Luo et al., 2022))	Research on the construction of Entrepreneurial Competency model of returned college students Based on Binary Semantic Fuzzy Evaluation	China	International Conference on Data Science and Business Analytics (ICDSBA)	QL	7	This study constructs a model structured in the four dimensions: social competency, entrepreneurial identity, innovation competency and management competency and also provides tools for returned college students to evaluate themselves and make entrepreneurial decisions.	Due to the complexity and uncertainty of entrepreneurial competency and the limitation of the knowledge and experience of evaluation experts, the selection of evaluation indicators may not be reasonable, and the evaluation results may also have some deviations.

(Venesaar et al., 2021)	Entrepreneurship Competence Model for Supporting Learners Development at All Educational Levels	Estonia	Administrative Sciences	QL	0	A framework of entrepreneurship competence is proposed putting forward the creative thinking ability and personality traits . The article also suggests how to support the development of entrepreneurship competence systematically at all levels of education.	The main limitation is that it relies on practical experience of piloting the model and self-assessment tool in one country. The cultural and other differences need to be considered.
(Kruger et al., 2021)	A conceptual model of entrepreneurial competencies needed to utilise technologies of Industry 4.0	South Africa	The International Journal of Entrepreneurship and Innovation	QL	17	This article contributes to the broader knowledge by providing insights into which entrepreneurial competencies and associated business functions need to be developed to adopt aspects of I4 .	It is limited to one group and one field & not all technologies pertaining to I4 were included.
(Pennetta et al., 2023)	Navigating through entrepreneurial skills, competencies and capabilities: a systematic literature review and the development of the entrepreneurial ability mode	Australia	Journal of Entrepreneurship in Emerging Economies	QN	1530	This study proposes an evolving entrepreneurial ability model which interconnects genetic and acquired skill types, capabilities and competencies and is equipped with an Entrepreneurial Skills Map essential to operate in the 21st century.	It is limited to only one subject.
(Cárdenas-Gutiérrez et al., 2021)	Construction and validation of the Basic Scale of Entrepreneurial Competencies for the Secondary Education level. A study conducted in Spain	Spain	Plos One	MI	QL(72) QN(1440)	A basic scale of entrepreneurial competencies for the secondary education was constructed including aspects of Operations and Marketing Competencies, Competencies in Socio-Business and Legal Organization	It is limited to secondary education in Spain, which means it has global application in other culture and other level of institution.

						and Economic-Financial Competencies.	
(Ataei et al., 2020)	A conceptual model of entrepreneurial competencies and their impacts on rural youth's intention to launch SMEs	Iran	Journal of Rural Studies	QN	361	A set of entrepreneurship competencies are proposed focusing accountability, self-management, strategic foresight and planning, planning ability, and market analysis and interpretation.	It limited itself to one group of people.

Note. M: Method; P: Population; C: Conceptual; QN: Quantitative; QL: Qualitative & MI: Mixed

Findings

Objects and Contents of the Entrepreneurship Competency Models

Out of the thirteen studies examined, different research objects have different entrepreneurial competency contents and focus. Among these studies, various research objects are mentioned. There is one study on entrepreneurship competency model for lifelong learning strategy for European citizens (Bacigalupo et al., 2016), ten studies for higher education including universities and colleges (Ataei et al., 2020; Baczyńska et al., 2016; Capella-Peris et al., 2020; Ferreras-Garcia et al., 2021; Foucrier et al., 2019; Kruger et al., 2021; Luo et al., 2022; Pennetta et al., 2023; RezaeiZadeh et al., 2017; Silveyra et al., 2021), and one for students at all educational levels (Venesaar et al., 2021). As for the exact majors, fields or subjects, most studies are on business and engineering students, there are also ones on returned college students (Luo et al., 2022) and rural youth (Ataei et al., 2020). Through the above summary, it is found that most of the studies on entrepreneurship competency model tend to be in business or engineering categories, there are few studies on liberal arts majors such as humanities and social sciences. And most of the studies are focused on the institutions in higher education.

As for the contents, since studies have highlighted different entrepreneurship competency in the context of different fields, groups and countries, the entrepreneurship competencies are diverse in different dimensions. Generally, there are comprehensive and consolidated competencies covering a wide range of transversal competencies, which can be applied by citizens to all spheres of life (e.g., Bacigalupo et al., 2016), and those can be cultivated at all educational levels (e.g., Venesaar et al., 2021). There are also core or basic entrepreneurship competencies that purposely extracted and developed according to characteristics or special requirements for a certain group of people, major or field (e.g., Ataei et al., 2020; Baczyńska et al., 2016; Ferreras-Garcia et al., 2021; Kruger et al., 2021; Luo et al., 2022; RezaeiZadeh et al., 2017). Through the summary and analysis of the contents, it is found that they have something in common that almost all emphasize the cultivation of entrepreneurship knowledge and skill, but some other models present different priorities or focus for different fields. For example, some scholars propose the strengthening of thinking ability (e.g., Bacigalupo et al., 2016; RezaeiZadeh et al., 2017; Venesaar et al., 2021), the improvement of personality (e.g.,

Bacigalupo et al., 2016; RezaeiZadeh et al., 2017; Venesaar et al., 2021), and the shaping of humanistic quality(e.g., Bacigalupo et al., 2016), which are considered to have certain reference for the identification and construction of a conceptual entrepreneurship competency model for politics and law majors.

Methodology of the Entrepreneurship Competency Modeling

In regards to the methodology of the entrepreneurship competency modeling, the development of the models mainly includes the following methods. The first is the desk research of the literature review with a goal of bringing together all relevant previous study on entrepreneurship competency(e.g., Bacigalupo et al., 2016; Cárdenas-Gutiérrez et al., 2021; Venesaar et al., 2021); Qualitative method such as interviews with experts, students, successful entrepreneurs is the second commonly used method to develop the items of the entrepreneurship competency model (Foucrier et al., 2019; Kruger et al., 2021; Luo et al., 2022; RezaeiZadeh et al., 2017; Venesaar et al., 2021); The third source of the model content is from the quantitative method which is usually conducted in a survey in the form of the questionnaire (Ataei et al., 2020; Bacigalupo et al., 2016; Capella-Peris et al., 2020; Ferreras-Garcia et al., 2021; Pennetta et al., 2023). The last method utilized in the entrepreneurship competency modeling is the combination of the qualitative and the quantitative named mixed method (e.g., Bacigalupo et al., 2016; Cárdenas-Gutiérrez et al., 2021).

Discussion and Limitation

Through the systematic review and the meta-analysis of the entrepreneurship competency model, many scholars have put forward different opinions on entrepreneurship competency from different perspectives, dimensions and depths, many case studies and research programs were conducted aimed at the development of entrepreneurial competencies in teaching institutions or in some other contexts. However, the fact is that, although entrepreneurship competency exploration and cultivation have grown in recent decades, there are authors who still maintain and claim that it should be constantly promoted (Saraiva et al., 2020), courses and programs on entrepreneurship competency are not sufficiently embedded into the curricula of higher educational institutions (Wibowo et al., 2018), and that entrepreneurship education at university level is deficient and generally found in business disciplines (Suska, 2018), which means, in other words, most of the entrepreneurship competency research are mainly proposed or summarized focusing students majoring in business or engineering and is not necessarily suitable for every level or every type of school or institution(e.g, (Ataei et al., 2020; Foucrier et al., 2019; Kruger et al., 2021). There is little scholarly attention on the entrepreneurship competency of liberal arts including social science and humanities, and no existent study of politics and law majors in vocational colleges in particular. Besides, it is noted that many of the previous study needs further application in practice in order to verify the validity of these proposed entrepreneurship competency models (Bacigalupo et al., 2016; Baczyńska et al., 2016; Capella-Peris et al., 2020). In addition to that, considering the relatively small selection number of research objects and samples in the modeling process, the general applicability of the models in other culture or institutions also remains to be verified. Moreover, the construction of the models mainly consider the role of individual in entrepreneurship from the perspective of entrepreneurial subjects, and ignores the influence of non-subject factors on the cultivation of entrepreneurial competency.

Implication

Through the summary of the literature review, this study contributes to clearly indicating the research gap and the future research direction, that is, the construction of a conceptual entrepreneurship competency model for politics and law majors. Studies of the previous scholars provided a pooled resource about the entrepreneurship competencies, hence, on the basis of the given research, and in full consideration of the specific characteristics of vocational colleges of political science and law, a set of frameworks of the entrepreneurship competencies was extracted. On the premise of referring to the previous scholars' methodology on entrepreneurship competencies modeling, suitable research procedures are designed. The findings and limitations of the systematic literature review eventually help the author with the proposal of a conceptual entrepreneurship competency model, which composes of knowledge, skill, thinking ability, personality and humanistic quality. The conceptual model is established with purpose to cultivate students' deep and changeable capacities to adapt to the flexible changes in the political and legal entrepreneurship practice. The model is a progressive, interrelated competency system with some emphasis. That means, apart from the knowledge and skill of entrepreneurship, the cultivation of entrepreneurial competency should be given more tilt in the construction of thinking ability, the shaping of personality and the nourishing of humanistic quality.

Conclusion

By reviewing the literature, it was found several entrepreneurship competency models have been developed and built up in the EU, the UK, the US and in China, which focusing more on what general sub-competencies are included. These models are mainly developed with the tilt on colleges of science and technology, the cultivation of entrepreneurship competency has been based on the teaching and objectives of this kind of colleges, and business issues tend to dominate such integrated efforts, influenced by current unbalanced valuation materials and economic directives. Though the systematic literature review, it is noted that few are focused on liberal arts, rare for politics and law majors making them less transferable or applicable to different learning contexts. To a large extent, the existing entrepreneurship competency cultivation or competency models have some deficiencies or limitations. Therefore, considering the characteristics of the political science and law majors, it is desirable to construct an entrepreneurship competency model with its own unique features suitable in vocational colleges of political science and law. In addition to the role of individual in entrepreneurship from the perspective of entrepreneurial subjects, the environmental factors should also taken into consideration while developing and cultivating the entrepreneurship competency model.

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Declaration of interest: The authors declare that they have no competing interests.

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