International Journal of Electronic Business

ISSN online: 1741-5063 - ISSN print: 1470-6067
https://www.inderscience.com/ijeb

Entrepreneurship vs. e-entrepreneurship: an evaluation of entrepreneurial orientations for social and economic development

Liping Wang

DOI: 10.1504/IJEB.2024.10063200

Article History:

Received:	31 August 2023
Last revised:	20 November 2023
Accepted:	05 December 2023
Published online:	02 December 2024

Entrepreneurship vs. e-entrepreneurship: an evaluation of entrepreneurial orientations for social and economic development

Liping Wang

School of Innovation and Entrepreneurship,
Zhengzhou University of Economics and Business,
Zhengzhou, Henan, 451191, China
Email: qiangwei_22@163.com

Abstract: Entrepreneurship and e-entrepreneurship both are vital for fostering dynamism, adaptability, and prosperity in today's rapidly evolving business landscape. Entrepreneurship fuels innovation, job creation, and economic growth that support driving progress in various industries. However, e-entrepreneurship leverages digital platforms to reach global markets, fostering scalability, accessibility, and efficiency. This study specifically explores the nexus of both orientation modes toward corporate social and economic development in China, a developing nation. First, this study examines the correlation between entrepreneurship and social development (SoD). Second, the study explores the relationship between entrepreneurship and economic development (EcD). Third, the study uncovers the relationship between e-entrepreneurship and SoD. Finally, the objective is to examine the relationship between e-entrepreneurship and EcD, respectively. The outcomes were obtained using a sample of 553 (N = 553) and utilising SEM method through SmartPLS. The study affirmed the positive relationships of entrepreneurship toward SoD and EcD. Likewise, this study assured the positive correlation of e-entrepreneurship toward SoD and EcD.

Keywords: entrepreneurship; e-entrepreneurship; social development; economic development; structure equation modelling.

Reference to this paper should be made as follows: Wang, L. (2025) 'Entrepreneurship vs. e-entrepreneurship: an evaluation of entrepreneurial orientations for social and economic development', *Int. J. Electronic Business*, Vol. 20, No. 1, pp.34–49.

Biographical notes: Liping Wang works at the School of Innovation and Entrepreneurship at Zhengzhou University of Economics and Trade. Her main research fields include career development and employment guidance for college students, innovation and entrepreneurship education, and entrepreneurship management for small and medium-sized enterprises. She has published papers in domestic and foreign journals, and led students to win first prises in 'Challenge Cup', 'Internet +' and National College Students E-commerce 'Innovation, Creativity and Entrepreneurship' challenge competition.

1 Introduction

Entrepreneurship is a cornerstone of economic growth and societal advancement. Entrepreneurship drives innovation, propels job creation, and fosters competition (Audretsch, 2012; Bruton et al., 2023). It identifies opportunities, taking calculated risks to turn ideas into viable ventures. Entrepreneurial endeavours contribute to local communities and global economies by introducing novel products, services, and business models (Bruton et al., 2023). This spirit of innovation sparks a cycle of progress, attracting investment and inspiring others to follow suit. Indeed, entrepreneurship's ripple effect empowers societies, fuels technological breakthroughs, and shapes a more prosperous and resilient future (Shahid et al., 2021; Waheed et al., 2018). Moreover, entrepreneurship cultivates a mindset of resilience and resourcefulness, essential in navigating uncertainties (Frese and Gielnik, 2014). It empowers individuals to shape their destinies, driving social change and addressing unmet needs. In a rapidly evolving world, entrepreneurship orientation remains pivotal, steering economies toward sustainable growth and fostering a culture of continuous improvement. However, e-entrepreneurship or digital entrepreneurship is pivotal in the modern landscape (Bui et al., 2003; Motlagh and Rafieian, 2023). It harnesses technology's potential to disrupt industries, streamline processes, and expand market reach exponentially (Gratzer et al., 2004; Wen and Chen, 2010). Using online platforms, e-entrepreneurs connect globally by accessing diverse talent and customer bases. This digital realm enables cost-effective testing of ideas, faster scaling, and real-time customer engagement. E-entrepreneurs tap into data analytics, refining strategies for optimal results (Zani, 2023). It is stated that embracing e-entrepreneurship is not only a competitive edge but also a catalyst for inclusive growth, bridging gaps and democratising business access. It reshapes commerce, empowers innovation, and reshuffles traditional paradigms for a digital, interconnected age. It is claimed that both entrepreneurial orientations play a productive role in optimising sustainable development, including social development and economic development.

Social development (SoD) is paramount for equitable and harmonious societies (Sanson et al., 2004). It encompasses initiatives that enhance education, healthcare, gender equality, poverty alleviation, and community empowerment. SoD fosters human capital, breaking cycles of deprivation and enabling upward mobility. It is reported that ensuring access to quality resources and opportunities creates a strong foundation for individuals to thrive in today's business environment (Doise, 1984). A socially developed society experiences reduced inequality and improved social cohesion along with sustainable progress. It is not only a moral imperative but also an investment in a prosperous future where every individual can contribute to and benefit from a just and flourishing community. Similarly, economic development (EcD) is essential for improving living standards and creating sustainable societies. EcD involves enhancing productivity, creating jobs, and boosting incomes (La Porta and Shleifer, 2008). EcD drives infrastructure development, innovation, and global competitiveness. It has been advocated over the past decades that attracting investments and promoting entrepreneurship, generates resources for social welfare programs (Nunn, 2009). EcD fosters economic diversification, reducing dependency on specific sectors. It empowers individuals with greater opportunities and access to services. Moreover, a robust EcD leads to higher tax revenues, supporting public services and social development

initiatives. ED is a catalyst for improved quality of life, equal distribution of wealth, and a resilient economy capable of adapting to challenges (Nunn, 2009).

This study has several motivations such as follows. To conduct additional research on entrepreneurship's intersection with social and economic development is crucial as explained by the researchers. Such research can inform targeted policies, fostering inclusive growth and reducing inequalities. Understanding how entrepreneurship impacts employment, innovation, and community empowerment aids effective resource allocation (Calcagno and Sobel, 2014). This research can unveil best practices, facilitating the creation of supportive ecosystems for entrepreneurs. In addition, exploring diverse cultural contexts and marginalised communities ensures tailored interventions. This research enhances our capacity to harness entrepreneurship as a driving force, propelling both social progress and economic prosperity while creating opportunities for previously underserved populations. Likewise, research on e-entrepreneurship's impact on social and economic development is vital is several reasons (Motlagh and Rafieian, 2023). It guides policy and investment decisions to harness digital innovation for inclusive growth. Its potential for job creation, market expansion, and technological advancement may enable it to maximise its benefits for both society and the economy (Porter and Donthu, 2006). Therefore, to add more to the existing literature, this study aims to meet certain objectives, as follows.

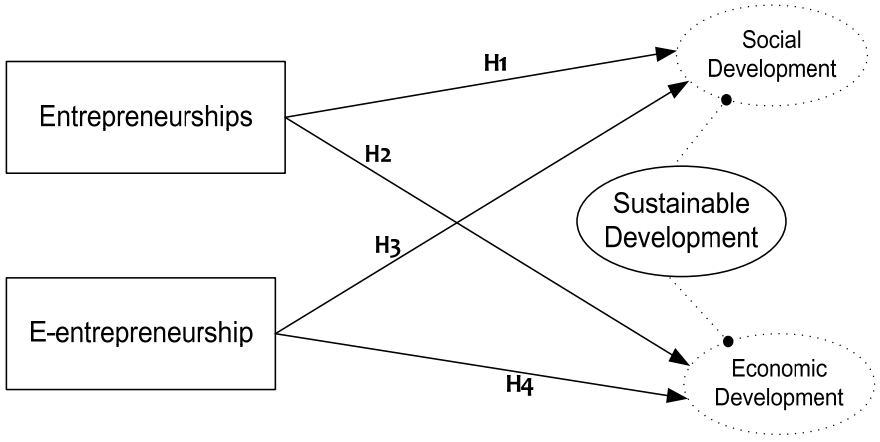
This study primarily investigates how entrepreneurship influences social development (SoD). Subsequently, it probes the relationship between entrepreneurship and economic development (EcD). Thirdly, it delves into the influence of e-entrepreneurship on social development (SoD). Finally, it surveys the correlation between e-entrepreneurship on economic development. This research falls into specific sections which are outlined in the succeeding discussion. These outlines provide a framework that how the study is arranged. It covers initially how to tackle theoretical structure and hypothesis. Following that it provides a detailed account of the study's methods, encompassing sampling, data collection, and analysis procedures. Then the analysis explores the specific discussion points and their implications. The concluding section addresses the major points, limitations, and creative horizons for the scholars of the world.

2 Theoretical framework and hypotheses

Innovation entrepreneurship theory (IET) is a framework that intertwines innovation and entrepreneurship concepts (Griffiths et al., 2012; Kuratko, 2011). It emphasises how entrepreneurial ventures leverage innovation to gain a competitive edge (Griffiths et al., 2012). IET posits that successful entrepreneurs identify novel opportunities, develop innovative solutions and create value by bringing these innovations to the market (Baumol, 2011). IET theory underscores the interplay between innovation, risk-taking, and market creation, highlighting how entrepreneurs drive economic progress through their ability to transform ideas into marketable products or services, contributing to economic growth, industry evolution, and societal advancement (Baumol, 2011). IET underscores that innovation isn't only limited to technology but also encompasses new business models, processes, and market strategies (Mehmood et al., 2019b). It recognises entrepreneurs as agents of change who navigate uncertainty, exploit market gaps, and catalyse economic development provides a robust framework to explore how

entrepreneurship, driven by innovation, can be harnessed for sustainable development such as social and economic development (Scully, 1988).

Figure 1 Research model



2.1 Entrepreneurship, social and economic development

As per researchers, there is a mutual relationship between entrepreneurship and both perspective of sustainablity such as social and economic development (Bansal, 2005). Economic expansion can be facilitated by entrepreneurial efforts as they accelerate creativity, yield employment, and expand wealth (Fornahl, 2003; Nunn, 2009). Entrepreneurship can concurrently increase social development by directing societal needs and giving marginalised groups opportunities (Sanson et al., 2004). It is clamed that socially developed environment can produce an entrepreneurial workplace that is healthier and more skilled which eventually will support economic growth (Clargo and Tunstall, 2011). Furthermore, there is a complex association between the entwined domains of entrepreneurship such as social and economic development (Ribeiro-Soriano, 2017). Entrepreneurs are necessary to the increase of the economy because they spot prospects, elaborate cutting-edge goods and services, and produce jobs (Dhaliwal, 2016). It has been recommended that entrepreneurship can act as a means of succeeding social mobility (Quadrini, 2000). Furthermore, it is affirmed that entrepreneurs frequently advance the way in innovation, originating new tools, approaches, and goods to encounter societal demands (Dhaliwal, 2016; Quadrini, 2000). Furthermore, as per innovation entrepreneurship theory, social advancement and economic growth are stimulated by the way of innovative activity (Griffiths et al., 2012; Kuratko, 2011). This theory highlights the necessity for additional investigation into the dynamic connections between social and economic development. Entrepreneurial efforts can shape innovation, create jobs, and effectively deal with societal issues (Veeraraghavan, 2009). This research can inform strategies that promote sustainable EcD, reduce inequality, and enhance overall societal well-being. Hence, with consideration of above précised discussion on entrepreneurship, social development, and economic development along with supporting arguments of theory, we presently aim to execute the following hypothesis for empirical evidence within the market of China.

H1 Entrepreneurial orientation is positively correlated with social development.

H2 Entrepreneurial orientation is positively correlated with economic development.

2.2 E-entrepreneurship, social and economic development

E-entrepreneurship also known as electronic entrepreneurship involves creating and operating businesses in the digital realm (Motlagh and Rafieian, 2023). It encompasses online startups, e-commerce ventures, and digital services (Matlay, 2004). E-entrepreneurs leverage technology to innovate business models, reach global markets, and capitalise on the digital economy's potential for growth and innovation (de Reuver et al., 2009; Matlay, 2004; Motlagh and Rafieian, 2023). E-entrepreneurship, social development, and economic development are thought to share a symbiotic relationship in the digital age as explained as follows (Ratten, 2013). For example, e-entrepreneurs seize digital opportunities, they contribute to EcD through increased trade and digital innovation (Ratten, 2013). E-entrepreneurship contributes to technological literacy and empowerment (Balachandran and Sakthivelan, 2013). As individuals engage in online business activities, they acquire digital skills and gain exposure to new technologies. This empowerment, in turn, supports social development by enhancing access to information, education, and online resources (Matlay, 2004). E-entrepreneurship thrives on innovation in digital technologies and business models (Jelonek, 2015). This digital innovation not only fuels entrepreneurial success but also fosters economic as well as social advancement (Berger et al., 2021). As digital ecosystems evolve, organisations contribute to economic development by spurring technological advancements and creating new markets (Berger et al., 2021; Ratten, 2013). E-entrepreneurs can address societal challenges through digital solutions (Motlagh and Rafieian, 2023). E-entrepreneurship's environmental impact can influence sustainable development (Chen, 2021). E-entrepreneurship's potential to drive economic growth, expand access to resources, foster technological empowerment, and address social challenges underscores its hypothesised role in promoting both social and economic development (Matlay, 2004; Nunn, 2009; Ratten, 2013). On the other side, the innovation entrepreneurship theory (IET) provides a framework for understanding how e-entrepreneurship can bolster sustainable development, including social and economic development (Baumol, 2011; Griffiths et al., 2012; Kuratko, 2011; Scully, 1988). IET emphasises that innovative business models and technological advancements within e-entrepreneurship can create novel solutions to address environmental and societal challenges (Zhao, 2006). Research guided by IET can explore how e-entrepreneurs integrate sustainability principles, develop eco-friendly technologies, and promote responsible consumption (Motlagh and Rafieian, 2023; Zhao, 2006). Therefore, with consideration of above précised discussion on e-entrepreneurships, social development, and economic development along with supporting arguments of IET theory, we presently aim to execute the following hypothesis for empirical evidence within the market of China.

H3 E-entrepreneurial orientation is positively correlated with social development.

H4 E-entrepreneurial orientation is positively correlated with economic development.

3 Methodologies

3.1 Data gathering and sampling

In this study, we distributed 900 questionnaires were dispersed in the Chinese market during this study. With the cooperation of Chinese partners, certain techniques were utilised for data collection like online transmission through WeChat, e-mails, and some personal visits. According to this research, respondents were requested individually, and 780 feedbacks were eventually returned. On account of data analysis for getting genuine feedback, 535 surveys (n = 535) were finalised after judging and examining inappropriate filled details including significant issues like unfinished feedback. A seven-point Likert scale formula was mainly utilised after getting inspiration from already published work of researchers (Mehmood et al., 2019a; Shahid et al., 2022; Younas et al., 2017). Additionally, the primary investigation including a set of 49 questions and respondents' profiles were evaluated on behalf of five traits (see Table 1).

Figure 1 Descriptive findings

	Male		*Female*	
	Freq.	*%*	*Freq.*	*%*
Gender	355	64.19	198	35.81
Qualification				
Bachelor	095	26.76	042	21.21
Master	092	25.92	053	26.77
PhD	075	21.13	079	39.90
Others	093	26.20	024	12.12
Age in years				
17–20	082	23.10	040	20.20
21–23	098	27.61	042	21.21
24–27	075	21.13	078	39.39
>28	100	28.17	038	19.19
Income				
5–10k RMB	072	20.28	035	17.68
11–15k RMB	102	28.73	045	22.73
16–21k RMB	095	26.76	080	40.40
>22k RMB	086	24.23	038	19.19
(N = 553)				

3.2 Measures

First, the entrepreneurship scale was accessed using 15 items as adopted from the past study (Huynh and Patton, 2014). Second, the e-entrepreneurship scale was accessed using 16 items as adopted from the past study (Laghouag, 2022). Finally, scales for social and economic development were measured using 14 items as adopted by Bansal (2005). Moreover, to have healthier and more suitable outcomes, it is essential to tackle pilot testing before researching at a higher level (Thabane et al., 2010). Gaining this purpose on behalf of the evaluation criteria of statisticians, 45 opinion polls were conducted (Black and Babin, 2019; Hair, 2011). According to Hair (2011), the existing values show normalcy with entrepreneurship at 0.801, e-entrepreneurship at 0.809, economic development at 0.765, and social development at 0.812.

3.3 Analysis tools and techniques

First, we employed descriptive statistics to determine the central statistics about the participants' profiles. Subsequently, a correlation testing method was used to understand the interrelations among variables of the study. Third, discriminant validity was determined based on two methods such as Fornell and Larcker along with heterotrait-monotrait (HTMT) methods (Ab Hamid et al., 2017; Fornell and Larcker, 1981a). Likewise, the convergent validity approach was carried out as per suggested methods such as AVEs, loadings, and by evaluation of reliability (Cyr and Bonanni, 2005; Russell, 1978). SEM using SmartPLS software was eventually applied to affirm the directional relationships among the variables (Ramayah et al., 2018; Salloum and Al-Emran, 2018). It is critical to calculate the values of NFI and SRMR to confirm the authenticity of the model, SEM (Hu and Bentler, 1999). The advised criteria for each analysis and indices are reported as follows. For instance, values should be between –1 to +1 in Pearson testing (Cohen et al., 2009; Hair, 2011), loading and AVEs outcome values should be lower than 0.5 (Hu and Bentler, 1999), reliability values should be higher than 0.7 (Hair, 2011), values should <0.9 in HTMT (Henseler et al., 2015), the outcomes of Square roots of AVEs should be higher than the following interrelationships in discriminant validity (Henseler et al., 2015), values of normalised fit index (NFI) should be higher than 0.9 (Hu and Bentler, 1999), and finally the outcomes of standardised root mean squared residual (SRMR) should lower than 0.08 (Hair, 2011; Hu and Bentler, 1999). All these findings are consistent with some of the previous scholars where they used similar approach to reveal the outcomes (Ahmad et al., 2023; Omer et al., 2016; Waheed et al., 2021; Wei et al., 2019).

4 Results

4.1 Validation process

Validity and reliability values alongside additional detail of means and standard deviations have been verified in the following Table 2. According to previous details loadings and AVEs product values should be lower than 0.5 as well as reliability values should be higher than 0.7 (Hair, 2011; N'Da et al., 2008).

Table 2 Validity process

	Coding	*Mean value*	*SD*	*Loadings*	*AVE*	*Reliability*
Entrepreneurship orientation					0.744	0.811
	EO-1	4.988	1.352	0.606		
	EO-2	5.188	1.021	0.555		
	EO-3	5.134	1.540	0.630		
	EO-4	4.988	1.354	0.633		
	EO-5	4.982	1.025	0.633		
	EO-6	5.189	1.356	0.505		
	EO-7	5.184	1.020	0.634		
	EO-8	4.985	1.543	0.633		
	EO-09	4.982	1.354	0.635		
	EO-10	5.189	1.026	0.550		
	EO-11	5.188	1.021	0.608		
	EO-12	5.134	1.540	0.555		
	EO-13	4.988	1.354	0.630		
	EO-14	4.982	1.025	0.633		
	EO-15	5.189	1.356	0.637		
E-entrepreneurial orientations (e-EO)					0.855	0.802
	e-EO1	5.188	1.353	0.608		
	e-EO2	5.134	1.020	0.512		
	e-EO3	4.980	1.540	0.630		
	e-EO4	4.944	1.353	0.633		
	e-EO5	5.189	1.024	0.637		
	e-EO6	5.184	1.358	0.505		
	e-EO7	5.188	1.358	0.608		
	e-EO8	5.134	1.020	0.551		
	e-EO9	4.986	1.533	0.630		
	e-EO10	4.982	1.353	0.633		
	e-EO11	5.189	1.024	0.686		
	e-EO12	5.184	1.350	0.554		
	e-EO13	5.188	1.358	0.630		
	e-EO14	5.134	1.020	0.633		
	e-EO15	4.984	1.540	0.637		
	e-EO16	4.955	1.350	0.505		

Notes: Items removed having <0.5 AVEs and loadings; EO – entrepreneurship orientation; e-EO – e-entrepreneurship orientation; SoD – social development; EcD – economic development.

Table 2 Validity process (continued)

	Coding	*Mean value*	*SD*	*Loadings*	*AVE*	*Reliability*
ED					0.742	0.844
	ED-F1	5.188	1.354	0.603		
	ED-F2	5.134	1.021	0.585		
	ED-F3	5.900	1.540	0.630		
	ED-F4	5.912	1.352	0.633		

Notes: Items removed having <0.5 AVEs and loadings; EO – entrepreneurship orientation; e-EO – e-entrepreneurship orientation; SoD – social development; EcD – economic development.

4.2 Analysis of Pearson's correlation

The results of the correlation analysis are mentioned in Table 3, confirming the association among the intended variables of this research. Ensure that values fall –1 to +1 range. Negative values signify a negative connection, lower values suggest a weaker connection and higher values imply a stronger connection (e.g., Fornell and Larcker, 1981a; Hair et al., 2019; Kline, 2005).

Table 3 Analysis of Pearson correlation

	EO	*e-EO*	*SoD*	*EcD*
EO	**1.000**			
e-EO	0.250	**1.000**		
SoD	0.301	0.140	**1.000**	
EcD	0.228	0.254	0.241	**1.000**

Notes: values should be between –1 to +1 in Pearson testing (Cohen et al., 2009; Hair, 2011). EO – entrepreneurship orientation; e-EO – e-entrepreneurship orientation; SoD – social development; EcD – economic development.

Table 4 Model of discriminant validity

	EO	*e-EO*	*SoD*	*EcD*
EO	**0.812**			
e-EO	0.282	**0.840**		
SoD	0.380	0.328	**0.870**	
EcD	0.188	0.207	0.227	**0.802**

Notes: Bold values are AVEs square roots and rest values are interrelationships. EO – entrepreneurship orientation; e-EO – e-entrepreneurship orientation; SoD – social development; EcD – economic development.

4.3 Model of discriminant validity

Table 4 elaborates the specific values of discriminant research, utilised for confirmation of dataset. Certain methods have been proposed by researchers for the under-discussed analyses. For instance, the product of the AVEs square root should be greater than the following interrelationships in discriminant validity (Fornell and Larcker, 1981b). The

bold figures in the initial row of each column depict the square roots of AVEs, and non-bold values express interrelationships.

4.4 Heterotrait-monotrait

Besides, Fornell and Larcker (1981b) analysis, heterotrait-monotrait (HTMT) is another approach verifies the data validity by probing the analogies. In HTMT analysis according to Henseler et al. (2015) values ought to be less than 0.9. So, the current result validates the HTMT validity on behalf of the following result's accuracy.

Table 5 HTMT

	EO	*e-EO*	*SoD*	*EcD*
EO				
e-EO	0.327			
SoD	0.110	0.369		
EcD	0.236	0.274	0.323	

Note: The values should be <0.9.

4.4 Path relationships using SEM

Table 6 elaborates the directions of key pathways assessed using beta values in a structural equation model. NFI and SRMR are suggested to be examined to scrutinise and analyse the validity of structural equation model. For instance, the values of NFI should be higher than 0.9 and SRMR should be lower than 0.08 (Hu and Bentler, 1999). The existing values fit well as per a specific criterion where NFI approached 0.928 and SRMR at 0.035.

Table 6 SEM model results

Directions	*Direct*	*ED*	*Sig.*	*SE*	*Decision*
H1: EO→SoD	0.304***	±	0.001	0.024	Supported
H2: EO→EcD	0.452***	±	0.000	0.045	Supported
H1: e-EO→SoD	0.266***	±	0.000	0.022	Supported
H2: e-EO→EcD	0.308***	±	0.000	0.078	Supported
Model fitness					
	NFI	0.928			
	SRMR	0.035			

Notes: ***Sig at 0.05.
ES – expected signs; SE – standard errors.
EO – entrepreneurship orientation; e-EO – e-entrepreneurship orientation;
SoD – social development; EcD – economic development.

5 Discussion and implications

A total of 4 hypotheses were proposed to explore the nexus among entrepreneurship orientation, E-entrepreneurship (e-EO), social development (SoD), and economic development (EcD) from the domain of China. First, it was assumed in H1 that EOis positively linked with SoD. The results after SEM implementation have shown a positive connection between EO and SoD at (β = 0.304***; 0.001). Based on such calculations and findings, H1 is accepted which affirmed that EO influences SoD (EO → SoD). Second, it was assumed in H2 that EO are positively linked with EcD. The results have shown a positive connection between EO and EcD at (β = 0.452***; 0.000). Therefore, based on such calculations and outcomes, H2 is accepted which affirmed that EO influences EcD (EO → EcD). In addition, the outcomes are supporting past studies in which experts suggested a positive connection of EO form sustainable development perspective from numerous perspectives, worldwide (Audretsch, 2012; Dhaliwal, 2016; Fornahl, 2003; Joyce and Winch, 2005; Kuratko, 2011; Nunn, 2009; Veeraraghavan, 2009; Zhao, 2006).

Third, it was assumed in H1 that e-EOis positively linked with SoD. The results after SEM implementation have shown a positive connection between e-EO and SoD at (β = 0.266***; 0.000). Based on such calculations and findings, H3 is accepted which affirmed that e-EO influences SoD (e-EO → SoD). Finally, it was assumed in H4 that e-EO is positively linked with EcD. The results have shown a positive connection between e-EO and EcD at (β = 0.308***; 0.000). Therefore, based on such calculations and outcomes, H4 is accepted which affirmed that e-EO influences EcD (e-EO → EcD). Additionally, the current outcomes are consistent with past studies in which experts suggested a positive connection of EO form sustainable development perspective from numerous perspectives, worldwide (Balachandran and Sakthivelan, 2013; Matlay, 2004; Motlagh and Rafieian, 2023; Ratten, 2013; Veeraraghavan, 2009).

5.1 Implications

From theoretical standpoint, this work adds to the body of literature entrepreneurship orientation (Adeola and Evans, 2020), e-entrepreneurship (e-EO), social development (SoD), and economic development (EcD) from the domain of China. This study empirical contributes to the relevant literature conducting comparison between EO and e-EO in terms of SoD and EcD to provide additional evidence. From a managerial perspective, EO bears significant managerial implications for both SoD and EcD. For SoD standpoint, fostering EO within organisations can spur community engagement, innovation, and social impact initiatives, enhancing societal well-being. Simultaneously, EO's alignment with EcD can drive economic growth, encouraging innovation, market expansion, and job creation. The concerned management suggests that by striking a balance between EO's risk-taking and strategic focus is essential for optimal outcomes. Managers should integrate EO into business strategies, promoting responsible entrepreneurship for sustainable societal advancement and robust economic progress which eventually thereby synergising SoD and EcD goals. The related management is suggested that assessing the entrepreneurial is immensely decisive for the success of business. Management must foster a culture that involves change while reflecting ethical and environmental

considerations. This capability can permit the organisations to positively contribute both social and economic dimensions.

Nevertheless, there various implications are suggested to management in terms of e-entrepreneurship. For instance, the expansion of e-EO carries significant managerial implications for social and economic development. It is suggested that by adopting digital innovation and agility, e-EO can lead job creation, market expansion, and technology expansion that eventually bolstering economic development. It is additionally recommended that by leveraging online platforms and connectivity, e-EO can accelerate a greater community engagement and inclusive growth by fostering social development. Hence, managers must control the potential of e-EO while addressing digital divides. By navigating these challenges, firms can effectively trigger e-EO to synergistically advance both social welfare and economic progress. Finally, managers are evoked to seize the e-EO along with EO potential by fostering a culture of digital innovation. An alliance with local communities can tackle specific social needs whereas strategic partnerships can amplify positive economic outcomes.

6 Conclusions

It is concluded that entrepreneurship and e-entrepreneurship emerge as powerful catalysts for both social and economic development. Entrepreneurial orientation drives innovation, job creation, and market expansion, fostering economic growth. Likewise, e-entrepreneurship's digital realm enhances connectivity, inclusivity, and efficiency, propelling economic advancement. Moreover, both forms of entrepreneurship empower communities, facilitate knowledge dissemination, and address societal challenges, nurturing social development. The synergy between entrepreneurship and e-entrepreneurship underscores their pivotal roles in shaping a balanced and sustainable developmental landscape whereby economic progress and social well-being are intertwined for a prosperous future. Besides, the study concluded a positive connection between entrepreneurship, economic development, and social development. It is also concluded that there is a positive connection between e-entrepreneurship, economic development, and social development. Both streams if entrepreneurial orientations could play an important to lead social and economic development within the Chinese market.

6.1 Limitations and future work

Like other research works, it bears its limitations which may open new doors of awareness for the upcoming researchers to creep into the entrepreneurship, e-entrepreneurship, social development, and economic development from Chinese' sphere. Regarding its limitations, the first one is the undersized sampling which may be a hurdle to its generalisation. At second place, just a single progressing country was focused, i.e., China. The third limitation is that the research overlooks the inclusion of any mediation-moderation variables in evaluating the correlation among EO, e-EO, SoS, and EcD to confirm the correlative potency of variables. Hence, it is advisable to employ a big sample size for longitudinal research in both the Chinese context and other global economies. To enhance the depths of connections among EO, e-EO, SoS, and EcD, future investigation may broaden their scope through incorporating specific meditating factors.

No doubt researchers are increasingly intrigued by the junction of entrepreneurship, especially e-entrepreneurship with balanced expansion which may serve as a future focal point for investigating its impact in different dimensions of the world.

References

Ab Hamid, M., Sami, W. and Sidek, M.M. (2017) 'Discriminant validity assessment: use of Fornell & Larcker criterion versus HTMT criterion', *Journal of Physics: Conference Series*, Vol. 890, No. 1, p.012163.

Adeola, O. and Evans, O. (2020) 'ICT, infrastructure, and tourism development in Africa', *Tourism Economics*, Vol. 26, No. 1, pp.97–114.

Ahmad, W., Jafar, R.M.S., Waheed, A., Sun, H. and Kazmi, S.S.A.S. (2023) 'Determinants of CSR and green purchase intention: mediating role of customer green psychology during COVID-19 pandemic', *Journal of Cleaner Production*, Vol. 389, p.135888.

Audretsch, D. (2012) 'Entrepreneurship research', *Management Decision*, Vol. 50, No. 5, pp.755–764.

Balachandran, V. and Sakthivelan, M.S. (2013) 'Impact of information technology on entrepreneurship (e-entrepreneurship)', *Journal of Business Management & Social Sciences Research*, Vol. 2, No. 2, pp.51–56.

Bansal, P. (2005) 'Evolving sustainably: a longitudinal study of corporate sustainable development', *Strategic management journal*, Vol. 26, No. 3, pp.197–218.

Baumol, W.J. (2011) 'Formal microeconomic structure for innovative entrepreneurship theory', *Entrepreneurship Research Journal*, Vol. 1, No. 1, pp.35–40.

Black, W. and Babin, B.J. (2019) 'Multivariate data analysis: its approach, evolution, and impact', *The Great Facilitator: Reflections on the Contributions of Joseph F. Hair, Jr. to Marketing and Business Research*, pp.121–130, Springer, USA.

Bruton, G.D., Lewis, A., Cerecedo-Lopez, J.A. and Chapman, K. (2023) 'A racialized view of entrepreneurship: a review and proposal for future research', *Academy of Management Annals*, Vol. 17, No. 2, pp.492–515.

Bui, T.X., Sankaran, S. and Sebastian, I.M. (2003) 'A framework for measuring national e-readiness', *International Journal of Electronic Business*, Vol. 1, No. 1, pp.3–22.

Calcagno, P.T. and Sobel, R.S. (2014) 'Regulatory costs on entrepreneurship and establishment employment size', *Small Business Economics*, Vol. 42, No. 1, pp.541–559.

Chen, Y-S. (2021) 'Sustainability innovation enabled by digital entrepreneurship in franchise organizations', *International Journal of E-Entrepreneurship and Innovation (IJEEI)*, Vol. 11, No. 1, pp.71–85.

Clargo, P. and Tunstall, R. (2011) 'Leading an entrepreneurial workforce: development or decline?', *Education+ Training*, Vol. 53, Nos. 8–9, pp.762–783.

Cohen, I., Huang, Y., Chen, J., Benesty, J., Benesty, J., Chen, J. and Cohen, I. (2009) 'Pearson correlation coefficient', *Noise Reduction in Speech Processing*, pp.1–4, Springer, USA.

Cyr, D. and Bonanni, C. (2005) 'Gender and website design in e-business', *International Journal of Electronic Business*, Vol. 3, No. 6, pp.565–582.

de Reuver, M., Bouwman, H. and MacInnes, I. (2009) 'Business models dynamics for start-ups and innovating e-businesses', *International Journal of Electronic Business*, Vol. 7, No. 3, pp.269–286.

Dhaliwal, A. (2016) 'Role of entrepreneurship in economic development', *International Journal of scientific research and management*, Vol. 4, No. 6, pp.4262–4269.

Doise, W. (1984) 'On the social development of the intellect', *The Future of Piagetian Theory: The Neo-Piagetians*, pp.95–121, Springer, USA.

Fornahl, D. (2003) 'Entrepreneurial activities in a regional context', *Cooperation, Networks and Institutions in Regional Innovation Systems*, pp.38–57, Edward Elgar Publishing, USA.

Fornell, C. and Larcker, D.F. (1981a) *Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics*, Sage Publications Sage CA, Los Angeles, CA.

Fornell, C. and Larcker, D.F. (1981b) 'Evaluating structural equation models with', *Journal of Marketing Research*, Vol. 18, No. 1, pp.39–50.

Frese, M. and Gielnik, M.M. (2014) 'The psychology of entrepreneurship', *Annu. Rev. Organ. Psychol. Organ. Behav.*, Vol. 1, No. 1, pp.413–438.

Gratzer, M., Werthner, H. and Winiwarter, W. (2004) 'Electronic business in tourism', *International Journal of Electronic Business*, Vol. 2, No. 5, pp.450–459.

Griffiths, M., Kickul, J., Bacq, S. and Terjesen, S. (2012) 'A dialogue with William J. Baumol: insights on entrepreneurship theory and education', *Entrepreneurship Theory and Practice*, Vol. 36, No. 4, pp.611–625.

Hair, J.F. (2011) 'Multivariate data analysis: an overview', *International Encyclopedia of Statistical Science*, pp.904–907, Springer, US.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019) 'When to use and how to report the results of PLS-SEM', *European Business Review*, Vol. 31, No. 1, pp.2–24.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015) 'A new criterion for assessing discriminant validity in variance-based structural equation modeling', *Journal of the Academy of Marketing Science*, Vol. 43, pp.115–135.

Hu, L.T. and Bentler, P.M. (1999) 'Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives', *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6, No. 1, pp.1–55.

Huynh, T. and Patton, D. (2014) *The Performance of University Spin-Offs: The Impact of Entrepreneurial Capabilities and Social Networks of Founding Teams during Start-Ups* [online] chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://eprints.bournemouth.ac.uk/21543/1/Huynh.pdf.

Jelonek, D. (2015) 'The role of open innovations in the development of e-entrepreneurship', *Procedia Computer Science*, Vol. 65, No. 1, pp.1013–1022.

Joyce, P. and Winch, G.W. (2005) 'An e-business design and evaluation framework based on entrepreneurial, technical and operational considerations', *International Journal of Electronic Business*, Vol. 3, No. 2, pp.198–214.

Kline, R.B. (2005) *Principles and Practice of Structural Equation Modeling*, Guilford Press, London.

Kuratko, D.F. (2011) 'Entrepreneurship theory, process, and practice in the 21st century', *International Journal of Entrepreneurship and Small Business*, Vol. 13, No. 1, pp.8–17.

La Porta, R. and Shleifer, A. (2008) *The Unofficial Economy and Economic Development*, National Bureau of Economic Research, UK.

Laghouag, A.A. (2022) 'Assessing the impact of e-entrepreneurship orientation key success factors on banks' performance', *Management and Entrepreneurship: Trends of Development*, Vol. 1, No. 19, pp.98–113.

Matlay, H. (2004) 'E-entrepreneurship and small e-business development: towards a comparative research agenda', *Journal of Small Business and Enterprise Development*, Vol. 11, No. 3, pp.408–414.

Mehmood, M.S., Jian, Z. and Waheed, A. (2019a) 'The influence of entrepreneurial leadership on organisational innovation: mediating role of innovation climate', *International Journal of Information Systems and Change Management*, Vol. 11, No. 1, pp.70–89.

Mehmood, T., Alzoubi, H.M., Alshurideh, M., Al-Gasaymeh, A. and Ahmed, G. (2019b) 'Schumpeterian entrepreneurship theory: evolution and relevance', *Academy of Entrepreneurship Journal*, Vol. 25, No. 4, pp.1–10.

Motlagh, M.R. and Rafieian, J. (2023) 'The impact of e-entrepreneurship on the digital marketing', *Journal Archive*, Vol. 14, No. 1, pp.1–8.

N'Da, K., Bergeron, F. and Raymond, L. (2008) 'Achieving advantages from business-to-business electronic commerce: an empirical validation of an integrative framework', *International Journal of Electronic Business*, Vol. 6, No. 5, pp.516–549.

Nunn, N. (2009) 'The importance of history for economic development', *Annu. Rev. Econ.*, Vol. 1, No. 1, pp.65–92.

Omer, N., Ahmed, A., Rabbi, F., Farrukh, M. and Waheed, A. (2016) 'Role of empowerment and leadership in turnover intentions among the generation Y academicians in Saudi Arabian higher educational institutes', *Journal for Studies in Management and Planning*, Vol. 1, No. 11, pp.719–733.

Porter, C.E. and Donthu, N. (2006) 'Using the technology acceptance model to explain how attitudes determine Internet usage: the role of perceived access barriers and demographics', *Journal of Business Research*, Vol. 59, No. 9, pp.999–1007.

Quadrini, V. (2000) 'Entrepreneurship, saving, and social mobility', *Review of Economic Dynamics*, Vol. 3, No. 1, pp.1–40.

Ramayah, T., Cheah, J., Chuah, F., Ting, H. and Memon, M.A. (2018) 'Partial least squares structural equation modeling (PLS-SEM) using SmartPLS 3.0', *An Updated Guide and Practical Guide to Statistical Analysis* [online] chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Hiram-Ting/publication/341357609_PLS-SEM_using_SmartPLS_30_Chapter_13_Assessment_of_Moderation_Analysis/links/5ebc2be6a6fdcc90d674eb9c/PLS-SEM-using-SmartPLS-30-Chapter-13-Assessment-of-Moderation-Analysis.pdf.

Ratten, V. (2013) 'Social e-entrepreneurship and technological innovations: the role of online communities, mobile communication and social networks', *International Journal of Social Entrepreneurship and Innovation*, Vol. 2, No. 5, pp.476–483.

Ribeiro-Soriano, D. (2017) 'Small business and entrepreneurship: their role in economic and social development', Vol. 29, No. 2, pp.1–3, Taylor & Francis.

Russell, J.A. (1978) 'Evidence of convergent validity on the dimensions of affect', *Journal of personality and social psychology*, Vol. 36, No. 10, p.1152.

Salloum, S.A. and Al-Emran, M. (2018) 'Factors affecting the adoption of E-payment systems by university students: extending the TAM with trust', *International Journal of Electronic Business*, Vol. 14, No. 4, pp.371–390.

Sanson, A., Hemphill, S.A. and Smart, D. (2004) 'Connections between temperament and social development: a review', *Social Development*, Vol. 13, No. 1, pp.142–170.

Scully, G.W. (1988) 'The institutional framework and economic development', *Journal of Political Economy*, Vol. 96, No. 3, pp.652–662.

Shahid, K., Yang, Q., Waheed, A. and Arif, F. (2022) 'Insights into consumers: exploring the impact of brand coolness on consumers' brand engagement with intervening role of brand love', *International Journal of Information Systems and Change Management*, Vol. 13, No. 2, pp.131–147.

Shahid, K., Yang, Q., Waheed, A. and Rashid, Y. (2021) 'The impact of technological alignment and advancement on firms' project performance with mediating role of technology acceptance model 1', *Human Systems Management*, Vol. 40, No. 2, pp.287–298.

Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L.P. and Goldsmith, C.H. (2010) 'A tutorial on pilot studies: the what, why and how', *BMC Medical Research Methodology*, Vol. 10, No. 1, pp.1–10.

Veeraraghavan, V. (2009) 'Entrepreneurship and innovation', *Asia Pacific Business Review*, Vol. 5, No. 1, pp.14–20.

Waheed, A., Yang, J. and Webber, J. (2018) 'Reinforcing consumers' impulsive buying tendencies through m-devices and emails in Pakistan', *Interdisciplinary Journal of Information, Knowledge & Management*, Vol. 13, No. 1, pp.45–58.

Waheed, A., Zhang, Q., Farrukh, M. and Khan, S.Z. (2021) 'Effect of mobile social apps on consumer's purchase attitude: role of trust and technological factors in developing nations', *Sage Open*, Vol. 11, No. 2, p.21582440211006714.

Wei, Q.S., Imran, M. and Waheed, A. (2019) 'The impact of higher education quality on student's satisfaction: empirical evidence from PR China', *Pacific International Journal*, Vol. 2, No. 1, pp.19–26.

Wen, K-W. and Chen, Y. (2010) 'E-business value creation in small and medium enterprises: a US study using the TOE framework', *International Journal of Electronic Business*, Vol. 8, No. 1, pp.80–100.

Younas, A., Wang, D. and Waheed, A. (2017) 'Fostering work outcomes: the interactive effects of organisational justice and Islamic work ethics', *International Journal of Information Systems and Change Management*, Vol. 9, No. 3, pp.238–257.

Zani, B. (2023) 'From reproductive labour to e-entrepreneurship, from wife and mother to a 'connected entrepreneur': case study from Chinese marriage migrants in Taiwan', *The Gender of Borders*, pp.179–198, Routledge, USA.

Zhao, F. (2006) 'Entrepreneurship and innovation in e-business: an integrative perspective', *Entrepreneurship and Innovations in E-business: An Integrative Perspective*, Vol. 6, No. 1, pp.53–60.