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Article

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ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE - REPLICATION STUDY

How does environmental perception affect the willingness of university students to return home to start a business?

Rongkun Qi¹, Dajiang Wang^{2*}, Yuqing Yang¹ and Feixia Wu²

Abstract: Entrepreneurial intentions play a crucial role in predicting entrepreneurial behavior. Entrepreneurship is not a solitary individual endeavor, but rather, it is interconnected with the interplay between the individual and society. Previous studies have not clearly distinguished the unique role of entrepreneurs as individuals engaging in the entrepreneurial process, and there remains a lack of research on the psychological processes of entrepreneurs' interactions with other people and their surroundings, which leaves a gap to be filled in entrepreneurship research. Therefore, this study introduces the concept of entrepreneurial environment cognition and re-examines the "process of interaction between entrepreneurial



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PUBLIC INTEREST STATEMENT

Entrepreneurial intentions are an important predictor of entrepreneurial behavior. Entrepreneurship is not an individual behavior in isolation, but is embedded in the interaction between the individual and society. Existing studies have failed to clearly distinguish the unique role of entrepreneurs as human beings engaging in the entrepreneurial process, and there is still a lack of research on the psychological processes of entrepreneurs' interactions with other people and their surroundings, which leaves a gap to be filled in entrepreneurship research. Therefore, this study introduces the concept of entrepreneurial environment cognition and re-examines the "process of interaction between entrepreneurial environment and subjects." In the process of university students returning to their hometown to start a business, the perspective and mindset that entrepreneurs take towards the entrepreneurial environment in their hometown may have an important impact on entrepreneurial intentions. Based on data results from 302 respondents, this study integrates insights from entrepreneurship and cognitive psychology research to illustrate the role of entrepreneurship and cognitive psychology in the process of university students returning to their hometown to start a business.

environment and subjects.” When university students return to their hometown to start a business, the entrepreneurial mindset and perspective towards the entrepreneurial environment in their hometown can significantly impact their entrepreneurial intentions. This study, based on data from 302 respondents, integrates insights from entrepreneurship and cognitive psychology research to illustrate the influence of entrepreneurship and cognitive psychology in the process of university students returning to their hometown to start a business. To ensure construct validity and reliability, Cronbach’s alpha, Composite Reliability, and heterotrait-monotrait ratio tests are adopted. Additionally, this study further explains the mechanisms underlying this relationship by outlining the role of entrepreneurial passion and policy support. The findings suggest that environmental perceptions contribute to the willingness of university students to return to their home town for entrepreneurship, while entrepreneurial passion acts as a bridge and presents a partially mediating role in the relationship. In addition, it was found that the pathway environmental perceptions—willingness to return to their home town for entrepreneurship was more significantly moderated by policy support. These findings also provide reference and suggestions for the government and other decision-making departments.

Subjects: Cognitive Psychology; Educational Psychology; Educational Psychology

Keywords: environmental perception; entrepreneurial passion; policy support; intention to return to the hometown and start a business; College student

1. Introduction

Entrepreneurial activity is considered a value-creating process that stimulates the vitality of the local economy and promotes employment (Ataei et al., 2020). Therefore, it is expected that entrepreneurship can drive growth and development in rural areas. However, the local environment plays a critical role in shaping behavior (Davey & Galan-Muros, 2020), thereby significantly influencing the frequency and nature of entrepreneurial activities (Modrego & Foster, 2021). Here, the context is defined by urban-rural differences, which impact the similarity between entrepreneurship in rural and urban areas. In rural areas, the natural environment, social network, and economic conditions form the essential foundations and sources of entrepreneurship opportunities (Greenberg et al., 2018). Dynamic changes in the environment affect each growth stage of entrepreneurial activities and the entrepreneurs themselves (Gnyawali & Fogel, 1994). In that sense, the lack of corresponding infrastructure and services has hindered business creativity in rural areas (Brooks, 2021 (de Guzman et al., 2020)). Studies have indicated significant variations in entrepreneurial activities across nations and regions due to environmental influences (Parker, 2009): some regions manifest high frequency and persistent entrepreneurial vitality, while others are more sporadic. Yet, despite challenges, entrepreneurial activity is particularly important for sustaining the development of rural areas in China (Llorent-Bedmar et al., 2021).

It is generally considered that university students, as an innovative and entrepreneurial force in the new era, are crucial for the revitalization of rural areas in China (Li & Atuahene-Gima, 2001). However, according to the “2021 China university students Entrepreneurship Report,” despite 96.1% of university students expressing willingness to start a business, only 14% have actually done so or have concrete plans, and only 1% intended to return to their rural hometowns to start a business. Although many university students have considered becoming entrepreneurs, due to factors such as public services and employment opportunities, most of them choose to remain situated away from their rural hometowns to seek development opportunities (Luo, 2023). Hence, the entrepreneurial motivations of university students can be said to be affected by their perceived

socio-economic environment (Vargas-Martínez et al., 2023). And their understanding and evaluation of the social environment in their rural hometowns may directly affect their willingness to return and start a business (Dheer & Castrogiovanni, 2023). Therefore, shifting university students' perceptions of their hometown's rural environment is a critical issue.

Entrepreneurial intention reflects an individual's perceptions and attitudes about the feasibility and desirability of engaging in entrepreneurial activities (Krueger, 1993). It utilizes the cognitive dimensions of entrepreneurship and predicts the extent to which an individual demonstrates willingness, commitment, and perseverance towards entrepreneurial goals (Wang & Shao, 2022). Extensive studies have demonstrated that entrepreneurs' cognition significantly influences their entrepreneurial intentions (Altinay et al., 2022; Díaz-Portugal et al., 2022; Liao et al., 2022; Lopes et al., 2023). While these findings are noteworthy, the understanding of entrepreneurial intentions remains incomplete under environmental interactions (Autio et al., 2013; Kuratko et al., 2021). Specifically, research is required to elucidate how entrepreneurs' perceptions of environmental conditions are linked to environmental conditions, so as to explain how entrepreneurs' preferences for different entrepreneurial environmental information affect their entrepreneurial intentions (Musolino et al., 2022; Shepherd, 2015; Treffers et al., 2017). This understanding is essential for comprehending entrepreneurs' decisions and behaviors during the entrepreneurial process. In addition, it is necessary to further discuss how university students use mental structures to recognize environmental information and understand signals of potential entrepreneurial opportunities (Barba-Sánchez et al., 2022; González-Padilla et al., 2023). Addressing these inquiries is vital for obtaining a deeper understanding of how potential entrepreneurs perceive the entrepreneurial environment and assess the path to venture creation (Krueger & Kickul, 2006).

Therefore, this study is aimed at bridging this research gap. Building upon the background mentioned above, this study draws on the person-environment fit theory and introduces the concept of environmental perception to re-examine the "interaction process between entrepreneurial environment and subjects." The study makes three main contributions to the field of entrepreneurship. First, this study explored students' willingness to start a business in their hometown based on their perception of the environment and conducts an in-depth analysis of the mechanisms behind their thoughts and intentions to become entrepreneurs in their hometowns. These findings enrich the research on the role of personal perception in the formation and maintenance of entrepreneurial intentions in one's hometown. The study also explores the influence mechanism between individuals' perception of external environment attributes and their entrepreneurial intentions from a cognitive perspective, enriching the research on the willingness to engage in entrepreneurial activities in hometowns from a cognitive perspective. Secondly, this study provides a key individualized cognitive unit, which contributes to a better understanding of how individuals' cognitive schema determines whether they undertake entrepreneurial behavior when encountering seemingly the same situation. Furthermore, this paper investigates entrepreneurs' preferences for different entrepreneurial environmental information based on the interaction between cognitive and affective components. The findings also provide effective means to address the poverty issue in rural areas and encourage university students to return to their hometowns to start businesses.

This paper consists of six sections. The Introduction section describes the background and the necessity to study entrepreneurial behavior from the perspective of environmental cognition. Section 1 presents the literature review and formulation of hypotheses. Section 2 explains the research methodology. Section 3 describes the data analysis and results. Section 4 discusses the results and their implications. Section 5 summarizes and presents the limitations of this study and opportunities for future research.

2. Literature review

2.1. Theoretical background

In recent years, there has been an increased focus on entrepreneurial activities, leading to a growing interest in entrepreneurial intention among experts and scholars. Most studies in the

field tend to focus on specific aspects of the entrepreneurial environment, such as the institutional environment (Kangogo et al., 2020), socio-cultural factors (Badghish et al., 2022), infrastructure (Chandrasekaran, 2021), social capital (Pérez et al., 2021), and entrepreneurship education (Huang et al., 2022). Few scholars have explored the entrepreneurial environment and university students' intentions to return to their hometowns to start a business from a cognitive perspective. It appears that there is a tendency to examine individual environmental factors affecting entrepreneurship separately.

Entrepreneurship is not an isolated individual behavior, but rather deeply interconnected with the interaction between the individual and society (Davey & Galan-Muros, 2020). The concept of "environment" has long been introduced into the study of entrepreneurial intentions. However, all relevant literature regards the environment as the physical space for entrepreneurial activities, and focuses on how the entrepreneurial environment facilitates entrepreneurial intentions (Dong et al., 2019; Luo et al., 2022; Sambharya & Musteen, 2014). Such literature neglects the presence and key influence of entrepreneurs' cognition in the entrepreneurial decision-making process, and fails to clearly distinguish the unique role of entrepreneurs as individuals engaging in the entrepreneurial process. Cognitive psychology theory regards "cognition" as the mechanism by which individuals receive and process information from the external environment (Neisser, 1967). Entrepreneurial cognition indicates entrepreneurs' ability to use their knowledge structures to integrate scattered information and to evaluate and reveal entrepreneurial opportunities, investment risks, and business growth strategies (Mitchell, 2002). Therefore, this study further explores the relationship between environmental cognition and the willingness of university students to return home to start businesses based on the social cognitive theory, so as to understand the interaction between individuals and their environment. In the context of this study, perceptions of the entrepreneurial environment refer to university students' understanding and evaluations of their external environment and their attitudes toward it (Edwards, 2008). Entrepreneurship does not happen in isolation but is deeply intertwined with the interaction between individuals and society. Individuals' entrepreneurial intentions are also affected by their social surroundings (Schmutzler et al., 2018). As highlighted in social cognitive theory (SCT), individuals, environments, and behaviors have a dynamic and reciprocal relationship. As a mediator of stimuli and responses, cognition determines how individuals respond behaviorally to environmental stimuli (Bandura, 1986). Existing research has shown that entrepreneurs' understanding of the environment directly influences their evaluation of the situation and the climate for starting a business (Huang et al., 2022). The more favorable the entrepreneurial environment, the greater the satisfaction of entrepreneurs and their willingness to start their businesses. Moreover, the value of the entrepreneurial environment, as perceived by entrepreneurs, is essential for persisting in entrepreneurship (Cheng et al., 2022; Peng et al., 2021).

SCT also emphasizes that personal factors, such as gender, age, occupation, beliefs, and emotional state, influence an individual's perceptions of their external environment and subsequent decisions to take action (Bandura, 1991). As indicated by Biraglia and Kadile (2017), "cognitive competencies and emotional states, in particular, can significantly influence the recognition of environmental cues and the decision-making process to engage in specific behaviors."

2.2. General literature review on the topic

Past studies have extensively explored the impact of individual characteristics and environmental factors on university students' willingness to return to their rural hometowns to start a business, yielding fruitful findings. Drawing on the theory of planned behavior, Nowiński et al. (2019) empirically examined the relationship between behavior, attitude, cultural norms, perceived control over behaviors, and entrepreneurial intentions of university students, as well as the moderating effects of entrepreneurial education and other variables.

Sun et al. (2020) concluded that creativity and risk-taking directly impacted entrepreneurial intentions, while the need for achievement and locus of control had indirect effects. Simões (2021)

used multiple and hierarchical regression analyses to examine the influential factors of the willingness to return to their hometown to start a business. The results revealed that return preparation, environmental incentives, policy support, the burden of failure, and family support were related to students' willingness to return. Ruiz-Palomino and Martínez-Cañas (2021) used original data on 616 university students enrolled in a variety of campuses and degrees in the central-southern area of Spain to analyze whether entrepreneurial intention mediates between opportunity recognition and the start-up phase of a business. Notably, the past studies, which focused on entrepreneurial characteristics, failed to determine the unique role of entrepreneurs as individuals in the entrepreneurial process. Further, the research on the psychological process of entrepreneurs when interacting with others and the environment remains limited. The term "environment" has long been introduced into the study of entrepreneurial intentions. Nevertheless, existing studies tended to consider the environment a spatial container of entrepreneurial activities, focusing on the role of the entrepreneurial environment in promoting entrepreneurial intentions (Dong et al., 2019; Luo et al., 2022) and ignoring the differentiated behaviors of individual entrepreneurs in a given environment. In this study, the perceived entrepreneurial environment was introduced to re-examine the interaction between entrepreneurs and the environment. The intention of potential entrepreneurs to create a business can be influenced by perceptions formed by knowledge of the environment. This has been demonstrated by several scholars (Martínez-Cañas et al., 2023; Neill et al., 2017). Therefore, the authors argue that structures, variables, and proposed relationships developed from a cognitive perspective have provided suitable research concepts and techniques to analyze the issue. Such an approach could lead to a better understanding of individuals' contributions to entrepreneurial processes.

2.3. Hypotheses development

2.3.1. *Impact of Environmental perception on willingness to return to hometown to start a business*

Environmental perception (ER) is a psychological concept that refers to an individual's understanding and evaluation of the surrounding environment (Gärling & Golledge, 1989). Social cognitive theory (SCT) holds that the social environment impacts individuals' behavior, and the external environment serves as a resource for enhancing self-prediction, regulation, and control (Bandura, 1991). Entrepreneurs' understanding and emotions toward entrepreneurship and future entrepreneurial practice are closely associated with the environmental context (Shepherd & Patzelt, 2018). The influence of the external environment on behavior, as an external stimulus, varies according to individuals' cognition, knowledge structures, and characteristics (Neisser, 1967). The cognitive perspective emphasizes that thoughts and behaviors are influenced by the cognitive mechanisms that store, transform, and process information (Baron, 2004). In entrepreneurial practice, intention serves as the foundation for entrepreneurial actions and the establishment of new ventures (Meoli et al., 2020).

As interest in entrepreneurial activity continues to grow among researchers, some professional researchers have begun to consider isolating and studying the environmental factors that influence entrepreneurial intentions (Haddad et al., 2021; Pham et al., 2022; Schwarz et al., 2009). Due to the ambiguous nature of environmental information, entrepreneurs often find it necessary to conduct thorough analyses for problem diagnosis. Milliken (1987) argues that when individuals perceive environmental uncertainty, they consider the need for entrepreneurial action more critically and are willing to invest more time and resources in evaluating its feasibility. Stewart et al. (2008) examined the environmental perception-scanning framework of entrepreneurs in the U.S. and India based on the institutional theory and entrepreneurial cognition theory, with results indicating that perceptions of environmental change and sector importance significantly impact entrepreneurs' ideas.

Entrepreneurs' perception of the environment in which their company is located can significantly influence decisions regarding business expansion, industry changes, and closures. This impact may

vary across different industries (Jung-Min & Hwansoo, 2019). Yao et al. (2016) pointed out that the cognitive process underlying the perception of the entrepreneurial environment is actually the process underlying the perception of entrepreneurial value, and university students' perceptions of their entrepreneurial environment can affect their entrepreneurial motivations. Their findings suggest that individuals' entrepreneurial intentions change when they are unable to predict how environmental factors will change and how such changes will affect entrepreneurial activity. Therefore, the authors take the stance that university students' environmental perceptions can impact their intentions to return to their hometowns-the environment influences the perceptions and beliefs formed by individuals and affects intentions (Fishbein & Ajzen, 2005). Positive environmental perceptions strengthen the willingness of university students to return home and start their own businesses, and vice versa. Based on the above findings, the following hypothesis has been proposed.

H1: Positive perception of environmental support positively affects university students' willingness to return to their hometowns to start a business.

2.3.2. Impact of Environmental perception on Environmental passion

Passion is defined as a strong desire to do something (Murnieks et al., 2014). Entrepreneurial passion is a positive emotion experienced by entrepreneurs during the process of starting a business and serves as the primary motivation for engaging in entrepreneurial activities (Bird, 1988). An activity must be significant in people's lives if it is to represent people's passion for people (Cardon et al., 2017). According to the person-environment fit theory, there is a mutual attraction between the individual and the environment (Ballout, 2007). Individuals' attitudes and behaviors are influenced by how their personal attributes are adapted to the external environment (Bhattarai & Budhathoki, 2023). When individuals perceive a greater fit between the environment and their own characteristics, they derive more satisfaction from their chosen organizations, professions, groups, and occupations (Duong, 2023; Tak, 2011; Zhu et al., 2022). Individuals who possess a clearer perception of their environment based on prior experiences tend to show more positive attitudes toward new experiences (Abdennadher & Boudabbous, 2023) and have the ability to retain information that is varied in nature. As people become aware of changes in their environment, they adjust their passions and life circumstances, shifting their attention to the evolving environment in order to adapt to new demands (Ghahremani et al., 2010; Hofmann et al., 2012). This process brings greater satisfaction and entrepreneurial passion to entrepreneurs. For novices who lack knowledge of entrepreneurial practices, they may rely on their perceived environmental fit to assess entrepreneurship as a career (Zhu et al., 2022). This is also evidenced by prior research related to entrepreneurial cognition, where integrated feedback and environmental perceptions act as an external stimulus that influences entrepreneurs' unique emotions and entrepreneurial passion (Yu, 2009). This observation highlights the influence of individuals' perception of fit within an entrepreneurial environment on the impact of entrepreneurial passion on intentions to engage in entrepreneurial activities (Dheer & Castrogiovanni, 2023). Given that entrepreneurship entails navigating challenges and encountering unexpected situations and events, passion may undergo dynamic changes. Building upon the aforementioned research, the authors propose the following hypothesis:

H2: Positive environmental perception positively affects entrepreneurial passion.

2.3.3. Entrepreneurial passion and entrepreneurial intention

Many studies believe that entrepreneurial intention is a strong predictor of entrepreneurial behavior (Fellnhöfer, 2017). Entrepreneurial passion, regarded as a positive emotion and ability (Cardon et al., 2012; Newman et al., 2021), holds significance in understanding entrepreneurial behavior and intention (Thorgren & Wincent, 2013). The entrepreneurial journey is rife with intricate challenges and obstacles that may lead entrepreneurs to give up on their pursuits and opt for more accessible career paths (Folta et al., 2009; Stenholm & Nielsen, 2019). However,

entrepreneurial passion aids entrepreneurs in surmounting challenges and fosters creative problem-solving abilities (Cardon, 2008; Frese & Gielnik, 2014; Thorgren et al., 2014), as supported by several studies (Biraglia & Kadile, 2017; Kumar & Shukla, 2023; Muzaffar, 2023). In the entrepreneurial process, passion plays a crucial role in identifying business opportunities and establishing new ventures (Karimi, 2020). Furthermore, entrepreneurial passion drives entrepreneurs to explore novel ideas, seek resources (including financial capital), and develop new products and services (Cardon et al., 2013; Newman et al., 2021). It is evident that entrepreneurial passion serves as a vital catalyst for entrepreneurship. Consequently, the authors propose the following hypothesis:

H3: Entrepreneurial passion positively affects the intention to return to the hometown and start a business.

2.3.4. Mediating effect of entrepreneurial passion

The appraisal theories of emotion propose that emotions are psychological responses and feedback resulting from the evaluation of environmental stimuli (Smith & Ellsworth, 1985). When individuals comprehend the meaning of contextual stimuli, they are more likely to respond appropriately after considering and judging the situation (Moors et al., 2013). On the one hand, entrepreneurs' positive perceptions of the environment can lead to more positive emotional responses, reinforcing their beliefs in achieving entrepreneurial goals (Baron & Tang, 2011; Schmutzler et al., 2018). Under the influence of positive environmental perceptions, potential entrepreneurs will have more advantage in information integration and resource access, and practice entrepreneurial orientation more actively (Hoang & Gimeno, 2010). On the other hand, studies have also indicated that the interaction between the external environment and entrepreneurs' emotional state influences their entrepreneurial activities (Kiani et al., 2020). The perceived alignment between the conditions provided by the entrepreneurial environment and entrepreneurs' personal characteristics impacts their intentions by influencing their passion (Kiani et al., 2020). When exploring potential connections between entrepreneurial passion, environmental perception, and the intention to start a business in the hometown, it is important to consider what brings meaning to university students' daily lives and adventures (Duong, 2023). The stimulus-organism-response theory is applied to investigate determinants of students' social entrepreneurship: moderation role of perceived university support. Their intention is driven by an existential journey aimed at the development of their hometown. Entrepreneurial passion plays a crucial role in propelling university students toward their larger existential goals, particularly in the face of economic uncertainties and work-life imbalances. According to H3 and H2, people with high entrepreneurial passion seem to be better able to utilize information about their surroundings to engage in entrepreneurship-facilitating work, which is consistent with the findings of previous studies. Hence, the authors propose the following hypothesis:

H4: Entrepreneurial passion mediates the relationship between environmental perception and intention to return to the hometown and start a business.

2.3.5. Moderating effect of policy support

Policy support refers to a series of government-initiated policies and measures aimed at promoting entrepreneurship and mitigating the adverse effects of external factors on entrepreneurial activities (Kim, 2022; SU et al., 2022). It has been noted that entrepreneurship policies can influence entrepreneurial intentions ((Neneh, 2022). For example, policy support plays a crucial role in fostering innovation and entrepreneurship education in higher education institutions, which, in turn, enhances students' inclination to become entrepreneurs (Zelin et al., 2021). In China, the government has implemented several preferential policies to encourage and support university students in returning to their hometowns to start businesses. As mentioned earlier, it has been well proved that environmental perceptions can enhance the willingness of university students to return to their hometowns to start businesses (Karan et al., 2023). The person-environment fit theory suggests that individuals' environmental perceptions determine the extent to which they

believe their demands can be met (Chuang et al., 2016; Kruse et al., 2023). In a specific institutional setting, a stable social environment increases individuals' likelihood to engage in entrepreneurial activities (Ali & Yousuf, 2019). Entrepreneurs' willingness to engage in entrepreneurial activities is at its peak when their needs for an entrepreneurial environment are met to a greater extent (Fantinelli et al., 2023; Hsu et al., 2019). For the needs of entrepreneurs, an unfavorable situation for any factor will lead to a diminishment in the influence of the other factor on intentions. Due to a lack of skills, resources, and information, university students are often unable to grasp market demand or obtain sufficient financial resources during the entrepreneurial process in their hometowns (Karan et al., 2023; Zhuang & Sun, 2023). Policy support provides effective incentives and support mechanisms for university students' entrepreneurial activities, effectively mitigating the adverse selection problem and entrepreneurship-related risks (Grilli et al., 2018). Therefore, the authors believe that the link between environmental perception and willingness to return home to start a business can be strengthened through policy support. As college graduates' grasp of policy support deepens, they will actively seek out relevant information, thus stimulating their entrepreneurial needs and willingness. Therefore, this paper proposes the following hypothesis:

H5: Policy support moderates the positive relationship between environmental perception and intention to return to the hometown and start a business.

Furthermore, this study aims to assess the impact of entrepreneurial passion on university students' intention to start a business in their hometown by investigating the influence of additional government support on such passion. The authors believe that policy support plays a role in the relationship between entrepreneurial passion and intention to return. The person-environment fit theory suggests that an individual's entrepreneurial attitude is determined by the individual's combined assessment of personal needs and external environment (Kristof-Brown et al., 2005). The correlation between the environment and an individual's attitude is stronger if the environment provides opportunities to fulfill the individual's basic psychological needs (Refoua & Rafaeli, 2023). The Chinese government has proposed and implemented a series of policies to promote entrepreneurship, such as simplifying unnecessary procedures and improving the transparency of government information. These policies have generally been found to stimulate the market and foster entrepreneurial aspirations. In this sense, the value placed on entrepreneurship by the social environment helps to foster positive perceptions of entrepreneurship among university students (Liu et al., 2022). Policy support demonstrates positive and favorable attitudes toward entrepreneurship in society (Gnyawali & Fogel, 1994), conveying to potential entrepreneurs that starting their own business is an attractive career choice (Duong, 2023). For example, Stenholm and Nielsen (2019) explored the emergence of entrepreneurial passion from the perspectives of emotional support and personal identity, and found that unexpected resources, including government funding, are vital sources of entrepreneurial passion because the government provides financial and venue support, while also conveying the message that entrepreneurs are cared for and welcomed, thus providing essential emotional support for entrepreneurs. In addition, social affirmation and affiliation with a particular community can inspire entrepreneurs' personal responsibility for the well-being of the community and their entrepreneurial passion (Boyd & Nowell, 2013). In this way, individuals are driven to action by their entrepreneurial passion and sense of belonging (Ciambotti et al., 2023). Therefore, the following hypothesis is proposed:

H6: Policy support moderates the positive relationship between entrepreneurial passion and intention to return to the hometown and start a business.

In summary, the authors have proposed and tested a moderating model for the role of environmental perceptions in the willingness of university students to return to the hometown to start a business. According to the model (Figure 1), positive environmental perceptions

promote entrepreneurial passion in university students' entrepreneurial practices in their hometown, while entrepreneurial passion, in turn, enhances university students' willingness to start businesses in their hometowns. The model also suggests that policy support moderates the relationship both between entrepreneurial passion and the willingness to return to the hometown to start a business and between environmental perception and the willingness to return to the hometown to start a business, and the effect is stronger in an environment with strong policy support than in an environment with weak policy support. Since prior studies have shown that negative influences do not have a consistent effect on entrepreneurial intentions, the model focuses only on the potential impact of positive influences ((Murnieks et al., 2020). However, this does not mean that negative impacts are irrelevant to university students' willingness to return to their hometowns to start a business; rather, it simply reflects the fact that existing evidence on the impact of this variable does not provide a strong and consistent empirical basis for theoretical predictions.

3. Research sample and methodology

3.1. Sampling and data collection

To test the aforementioned hypotheses, this study surveyed 500 undergraduate students from Wenzhou, Zhejiang Province, China. The study focused on university students' intention to return to their hometowns to start a business. Considering that freshmen often have unclear future plans due to various factors such as the external environment and limited growth experience (Haktanir et al., 2018), the survey primarily targeted junior and senior-level students. An online survey platform (wjx.com) was utilized, and students from six colleges and universities in Wenzhou were invited to participate. The survey was carried out between 15 March and 15 June 2022. A total of 500 questionnaires were distributed, out of which 302 valid responses were collected, with a response rate of 61%. The questionnaire encompassed descriptive information about the participants, as well as their perceptions of the hometown environment, entrepreneurial passion, and intention to return to the hometown for starting a business. All participants provided voluntary responses and were assured that their answers would remain anonymous and confidential.

To ensure the questionnaire's quality and to address any potential issues related to unclear expressions that could lead to misinterpretation of the subject matter, the distribution of the questionnaire underwent two stages. In the initial stage, a pilot survey was conducted, involving

Figure 1. The conceptual model.

Ep: Environmental perception, EP: Entrepreneurial passion, EI: Intention to return to hometown and start a business, PS: Policy support.

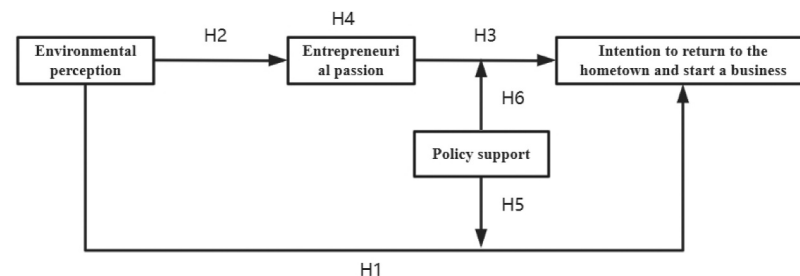
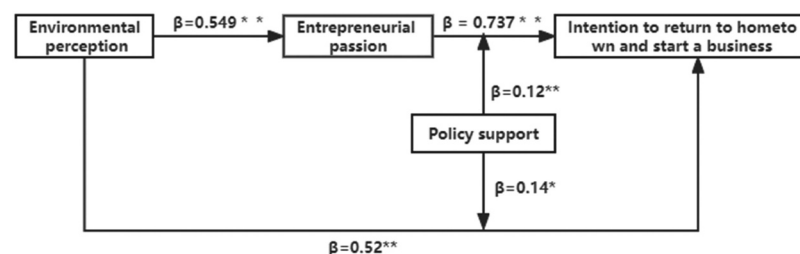


Figure 2. Structural equation model.



the random selection of a class of students and the distribution of 50 questionnaires. Subsequently, SPSS 24.0 was used to test the reliability and validity of the questionnaire, resulting in necessary revisions and improvements. In the subsequent stage, a formal survey was carried out.

3.2. Instruments

A 5-Point Likert Scale was used to measure all items, where 1 = “strongly disagree,” 2 = “somewhat disagree,” 3 = “agree,” 4 = “somewhat agree,” and 5 = “strongly agree.” The scores captured the overall attitude of the participants toward the survey topics. To ensure the validity and reliability of the instruments, the selection of scales followed three criteria: (1) all scales are interval scales suitable for social science research and can be attributed to numerical values (Rossiter & Garcia, 2010); (2) the scales have been widely used in the field of entrepreneurship research; (3) the reliability and validity of the scales were established using samples with comparable attributes.

3.2.1. Environmental perception

This study employed the scale developed by Gnyawali and Fogel (1994), with certain modifications to align with the research context and local characteristics. The scale encompassed five items assessing aspects such as infrastructure and financial support. For example, “The infrastructure in my hometown is quite adequate.” In this study, Cronbach’s α was 0.96.

3.2.2. Entrepreneurial passion

To assess entrepreneurial passion more comprehensively, the localized scale developed by Yaping et al. (2016) is adopted. The scale comprised 20 items and measured entrepreneurial passion across five dimensions: joy, flow, resilience, adventure, and identity. For example, “I enjoy the entrepreneurial process,” “I like starting a business.” In this study, Cronbach’s α was 0.880.

3.2.3. Policy support

The scale by Li and Atuahene-Gima (2001) was adopted for policy support, with modifications made to suit the research target of university students. The scale encompassed five items, such as financial support and tax incentives. In this study, Cronbach’s α was 0.96.

3.2.4. Intention to return to hometown and start a business

The entrepreneurial intent scale developed by Thompson (2009) was adopted, with modifications applied to align with the research content of this study. The scale comprised six items, such as individual interest in entrepreneurship and preparedness for the future. In this study, Cronbach’s α was 0.97.

3.2.5. Control variables

Existing studies have shown that demographic variables such as gender, education, grade, region, family financial conditions, and risk-taking ability impact entrepreneurial intentions. Therefore, this study controlled for gender (1 = “male” and 0 = “female”), registration of residence (1 = “rural” and 0 = “urban”), grade (1 = “junior college,” 2 = undergraduate, 3 = “graduate and above,” and 4 = “others”), major (1 = “science and engineering,” 2 = “economics and management,” 3 = “literature and law,” 4 = “education,” 5 = “medicine,” 6 = “art,” 7 = “agriculture,” 8 = “others”). This study also controlled for prior entrepreneurial experience (1 = “without” and 2 = “with”).

4. Results

4.1. Respondents’ demographic information

As shown in table 1, among the 302 students surveyed, 34.1% were male, and 65.9% were female. As for their household registration, 84.4% hailed from rural areas, while 15.6% had their household registration in urban areas. In terms of educational background, 97% were undergraduate students or at an advanced level, pursuing majors such as economics and management, science and

Table 1. Descriptive analysis (N = 302)

Item	Category	Sample Number	%
Gender	Male	106	34.9%
	Female	198	65.1%
Residence	Rural area	257	84.5%
	Urban area	47	15.5%
Grade	Junior college	13	4.3%
	Undergraduate	282	92.8%
	Postgraduate or higher	9	3.0%
Major	Science and engineering	34	11.2%
	Economics and management	224	73.7%
	Literature and law	16	5.3%
	Education	12	3.9%
	Medicine	2	0.7%
	Art	9	3.0%
	Agriculture	5	1.6%
	Others	2	0.7%
Only child	Yes	107	35.2%
	No	197	64.8%
Financial status	Very poor	10	3.3%
	Poor	55	18.1%
	Average	222	73.0%
	Wealthy	16	5.3%
	Very wealthy	1	0.3%
Entrepreneurial experience among family and friends	Yes	204	67.1%
	No	100	32.9%
Intern or part-time job experience	Yes	232	76.3%
	No	72	23.7%

engineering, and agriculture. Moreover, 76.5% of the students had previous internship or part-time job experiences, and 67.5% had family and friends with entrepreneurial experiences.

4.2. Model analysis

4.2.1. Assessment of the measurement model

To assess the internal consistency of the questionnaire, the reliability and validity analyses were performed using SPSS 24.0, and the results are shown in Table 2. Following the standards proposed by previous studies (SONG et al., 2021; Wang et al., 2021), a threshold of 0.7 was set for Cronbach's α . A value above 0.7 indicates satisfactory reliability (Shan & Tian, 2022). The factor loadings ranged from 0.70 to 0.93 ($p < 0.01$), which falls within the required range of 0.58 to 0.95, demonstrating high internal consistency of the scale.

The validity of the questionnaire was assessed using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of Sphericity, following the approach suggested by Wiguna and Manzilati (2014). The results of the KMO measure and Bartlett's test of Sphericity are presented in Table 2. Factor analysis is appropriate when there is a high correlation among the data (Dwivedi &

Table 2. Reliability and validity analysis (N = 302)

Variables	Dimension	Items	α	Factor Loading	KMO	AVE	CR
Environmental Perception	Environmental Perception	The economy of my hometown has developed considerably well recently.	0.96	0.82	0.91	0.75	0.94
		The entrepreneurial policy provided by my hometown is extremely good.		0.89			
		The infrastructure in my hometown is extremely adequate.		0.84			
		The technological and cultural environment in my hometown is considerably good.		0.89			
		The financial and service environment in my hometown is extremely good.		0.89			
Entrepreneurial Passion	Joy	I enjoy the entrepreneurial process.	0.95	0.88	0.77	0.82	0.93
		I like starting a business.		0.92			
		Entrepreneurship excites me.		0.92			
	Flow	I am confident that I can handle risks and challenges.	0.91	0.73	0.81	0.55	0.86
		I know exactly what I want.		0.70			
		I know the magnitude of my performance.		0.76			
		My focus is entirely on entrepreneurship-related activities.		0.79			
		If I dive into an entrepreneurial activity, I completely lose track of time.		0.72			
	Resilience	I can persevere for a long time to achieve my entrepreneurial goals.	0.93	0.77	0.83	0.59	0.88
		Even if I encounter significant difficulties in the process of starting a business, I will persist until the end.		0.78			
		I believe that, as long as I try my best, I can resolve most of the problems encountered in the entrepreneurial process.		0.78			
		I am a person who will never give up.		0.76			
		I believe that greatness is achieved through endurance, and persistence leads to victory.		0.74			
	Adventure	I like to explore uncharted territory.	0.95	0.80	0.87	0.63	0.87
		I like to try new solutions when faced with difficult problems.		0.81			
		I enjoy being challenged and enduring uncertainty in the environment.		0.79			
		My success is mainly due to bravery and risk-taking.		0.78			
	Identity	I consider myself an entrepreneur.	0.97	0.90	0.87	0.80	0.95
		I often think about things related to entrepreneurship.		0.86			
		When asked what kind of a person I am, people who know me will first consider me an entrepreneur.		0.90			
		I give the impression of being an entrepreneur.		0.93			
		My classmates and friends think I am an entrepreneur.		0.88			

(Continued)

Variables	Dimension	Items	α	Factor Loading	KMO	AVE	CR
Intention to Return to Hometown and Start a Business	Intention to Return to Hometown and Start a Business	I am extremely interested in returning to my hometown to start a business.	0.95	0.83	0.93	0.71	0.94
		I plan to return to my hometown to start a business in the future.		0.83			
		I will do my best to start a business.		0.78			
		I will take the initiative to pay attention to relevant policies and training courses.		0.87			
		I will save money to start a business in my hometown after graduation.		0.88			
		I am willing to take the time to understand and learn about information related to starting a business in my hometown.		0.85			
Policy Support	Policy Support	I think the resources provided by the government will help start a business.	0.96	0.89	0.87	0.82	0.95
		I am interested in using government funding for entrepreneurial activities if I start a business.		0.91			
		If I start a business, I want to use diverse funding networks actively.		0.91			
		If the government provides financial assistance for entrepreneurs, it will make me more determined to start a business.		0.92			

Weerawardena, 2018). The KMO values for the core variables ranged from 0.71 to 0.93 (>0.7), indicating satisfactory validity. Additionally, Bartlett's test of Sphericity yielded statistically significant results, further supporting the validity of the model. The questionnaire underwent a pilot survey and underwent multiple rounds of revision and improvement, ensuring good content validity. Table 2 displays the extracted average variance (AVE) and composite reliability (CR) of the scales. All AVE values exceeded the threshold of 0.5 (Fornell & Larcker, 1981), and all CR values were greater than the threshold of 0.7 (Bagozzi & Yi, 2012), indicating good convergent validity of the questionnaire.

As the data were collected at multiple time points, there is a possibility of common method bias. To address this concern, the study employed the Harman single factor test to identify common method variance. Further, exploratory factor analysis (principal component analysis) was conducted on the 27 items across the five scales. The results indicated that the cumulative variance explained by the eight factors with eigenvalues greater than 1 was 84.276%. Moreover, the unrotated first factor accounted for 35.482%, suggesting that common method bias was not a significant issue.

In evaluating discriminant validity, this study employed two assessment methods: i) ensuring that the correlation coefficient between constituent variables remains below 0.85 to mitigate multicollinearity issues; ii) comparing the square root of the Average Variance Extracted (AVE) for each dimension against the standardized correlation coefficient of other variables. According to Fornell and Larcker (1981), if the former exceeds the latter, it signifies robust discriminant validity among the scale dimensions. The results presented in Table 3 indicate that the correlation coefficients among each scale dimension are below 0.85, while the square root values of AVE surpass the correlation coefficients with other variables. These findings underscore the enhanced discriminant validity of the scale.

Table 3. Discriminant validity analysis results

Correlations	Environmental Perception	Entrepreneurial Passion	Policy Support	Intention to Return to Hometown and Start a Business
Environmental Perception	1.00			
Entrepreneurial Passion	0.520**	1.00		
Policy Support	0.48**	0.512**	1.00	
Intention to Return to Hometown and Start a Business	0.55**	0.73**	0.44**	1.00
AVE square root	0.87	0.79	0.91	0.84

4.2.2. Descriptive Statistics

Table 4 presents the correlations of the variables and the results of the descriptive analysis. The Pearson correlation coefficient, a commonly employed statistical analysis method (Schober et al., 2018), was used to measure the correlation between economic phenomena or variables (Garçon & Nassif, 2020). Notably, there was a significant positive correlation between environmental perception and intention to return to the hometown and start a business ($r=0.55$, $p<0.005$). The correlation coefficient between environmental perception and entrepreneurial passion was 0.52, and the result was statistically significant. Entrepreneurial passion exhibited a positive correlation with the intention to return to the hometown and start a business ($r=0.73$, $p<0.005$). These findings were consistent with H1 and H2, providing preliminary support for further verification.

4.2.3. Mediating Effect of Entrepreneurial Passion

This study employed the hierarchical regression method to test the proposed hypotheses. Entrepreneurial passion was considered the dependent variable, while control variables (such as gender, residence, and education), the independent variable (environmental perception), and corresponding interaction terms were included in the models. The findings of the regression analysis are presented in Table 5. According to M2, there was a positive correlation between environmental perception and entrepreneurial passion ($\beta=0.44$, $p<0.001$), and the R^2 was significantly higher than that of M1. Hence, H2 was supported. M3 yielded meaningful results when certain control variables were introduced. Specifically, the major and grade were found to have no significant impact on the intention to return to the hometown and start a business. However, gender ($\beta=0.29$, $p<0.01$) had a positive effect on the intention to return to the hometown and start a business. These findings suggested that the participants' upbringing environment also influenced their intention to start a business in their hometown. Risk-taking ($\beta=0.216$, $p<0.001$) positively influenced the intention to return to the hometown and start a business, suggesting that students with higher risk-taking capacity had stronger intention to start a business in their hometown. Additionally, students with their family or friends having entrepreneurial experience demonstrated a greater intention to start a business in their hometown ($\beta=0.191$, $p<0.05$). M4 shows that environmental perception had a significant positive effect on the intention to return to the hometown and start a business ($\beta=0.51$, $p<0.001$), thereby supporting H1.

M5 investigated the influence of entrepreneurial passion on entrepreneurial intention. The findings revealed a significant and positive impact of entrepreneurial passion on the intention to return to the hometown and start a business ($\beta=0.75$, $p<0.001$), thus supporting H3. Furthermore, in line with M2, environmental perception had a positive impact on entrepreneurial passion ($\beta=0.51$, $p<0.001$), which further supported H3. To explore the Bootstrap method was adopted to test further the mediating

Table 4. Correlation analysis									
Variables	1	2	3	4	5	6	7	8	9
1 Environmental Perception	1								
2 Joy	0.30**	1							
3 Flow	0.48**	0.68**	1						
4 Adventure	0.51**	0.62**	0.85**	1					
5 Identity	0.51**	0.62**	0.77**	0.73**	1				
6 Resilience	0.51**	0.66**	0.87**	0.85**	0.71**	1			
7 Entrepreneurial Passion	0.52**	0.82**	0.93**	0.90**	0.87**	0.92**	1		
8 Policy Support	0.48**	0.42**	0.49**	0.50**	0.37**	0.53**	0.51**	1	
9 Intention to Return to Hometown and Start a Business	0.55**	0.60**	0.65**	0.63**	0.71**	0.66**	0.73**	0.44**	1
M	3.34	3.30	3.39	3.44	3.06	3.45	3.33	3.83	3.32
SE	0.78	0.94	0.78	0.81	0.97	0.79	0.76	0.80	0.81

Table 5. Test results of direct and mediating effects

		Entrepreneurial Passion		Intention to Return to Hometown and Start a Business			
		M1 Control variables → Entrepreneurial passion	M2 Control variables → Environmental perception → Entrepreneurial passion	M3 Control variables → Intention to return to hometown and start a business	M4 Control variables → Environmental perception → Intention to return to hometown and start a business	M5 Control variables + Entrepreneurial passion → Intention to return to hometown and start a business	M6 Control variables + Entrepreneurial passion * Environmental perception → Intention to return to hometown and start a business
Control variables	Constant	2.05	0.87	2.176	0.8	0.632	0.244
	Area	0.14	0.09	0.38**	0.33**	0.27*	0.265**
	Gender	0.25**	0.12	0.29**	0.14	0.1	0.061
	Educational background	0.16	0.23	0.03	0.11	-0.09	-0.035
	Major	0.11**	0.07*	0.05	0.01	-0.02	-0.031
	Risk-taking	0.26***	0.22***	0.22***	0.17***	0.02	0.033
	Financial status	-0.11	-0.15	-0.09	-0.13	-0.003	-0.033
	Entrepreneurial experience among family and friends	0.09	0.04	0.19*	0.13	0.12	0.103
Independent variable	Environmental perception		0.44***		0.51***		0.234**
Mediating variable	Entrepreneurial passion					0.75***	0.638***
	R	0.41	0.6	0.39	0.61	0.75	0.78
	R ²	0.17	0.35	0.15	0.37	0.56	0.60
	F	8.864	20.079	7.66	21.69	48.23	49.43

effect of entrepreneurial passion on the relationship between environmental perception and the intention to return to the hometown and start a business. Process (V3.3) was used as the tool to perform the analysis, and the results are shown in Table 6. The 5% confidence interval was [0.19, 0.44], with 0 excluded. The mediation effect accounted for 56.08% of the total variance, indicating that entrepreneurial passion played a partial mediating role. Consequently, H4 was supported. The final result is shown in Figure 2.

4.2.4. Moderating Effect of Policy Support

This study utilized the moderated mediator test method introduced by Zhonglin et al. (2006). First, a hierarchical regression model was employed to examine the moderating effect of policy support. Subsequently, Process was used for further analysis. In the hierarchical regression analysis, M7 and M8 used environmental perception and entrepreneurial passion as the dependent variables, respectively, and intention to return to the hometown to start a business as the outcome variable. Moreover, policy support and the interaction terms of the two variables following centralized processing were included to assess the moderating effect of policy support. Table 7 presents the results, indicating that policy support had a significant positive impact on the relationship between environmental perception and the intention to return to the hometown and start a business. Therefore, H5 was supported. Similarly, M8 demonstrated that policy support strengthened the positive effect of entrepreneurial passion on the intention to return to the hometown and start a business ($\beta = 0.12, p < 0.01$).

Table 8 presents the results of the moderating effect of policy support. The moderating effects on the relationship between environmental perception and the intention to return to the hometown and start a business, under different intensities of policy support (M-SD, M+SD), were 0.22, 0.35, and 0.48, respectively. None of the 95% confidence intervals included 0. This indicates that the moderating effect of policy support was significant, thereby supporting H5. Similarly, the moderating effects of policy support on the relationship between entrepreneurial passion and the intention to return to the hometown and to start a business were 0.56, 0.66, and 0.76, respectively, with corresponding confidence intervals of [0.41, 0.71], [0.55, 0.76] and [0.66, 0.85]. With policy support, entrepreneurial passion had a more pronounced positive effect on the intention. Figures 3 and Figure 4 provided a visual representation of the moderating effect of policy support on the relationship between environmental perception, entrepreneurial passion, and the intention to return to the hometown and start a business. Figures 3 and Figure 4 depict simple slope effect diagrams, demonstrating that the slope of low policy support was significantly lower than that of strong policy support. Under strong policy support, the regression line representing the relationship between environmental perception and the intention to return to the hometown and start a business was steeper. This finding suggests that, with weak policy support, environmental perception had a greater impact on the intention to return to the hometown and start a business.

5. Discussion and Conclusion

This study was based on social cognition theory and person-environment fit theory. It incorporated entrepreneurial passion as a mediating variable and policy support as a moderating variable to examine the impact of students' environmental perception on their intention to return to their hometowns and start businesses. The following conclusions were drawn.

Table 6. Decomposition table of total, direct, and mediating effects

	Effect	BootsE	BootLLCL	BootULCL	% of Effect
Total Effect	0.54	0.06	0.31	1.90	
Direct Effect	0.24	0.07	0.08	0.37	43.92%
Mediating Effect of Entrepreneurial Passion	0.30	0.06	0.19	0.44	56.08%

(Remarks: LLCL = lower limit of 95% confidence interval, ULCL = upper limit of 95% confidence interval; $n = 302$).

Table 7. Moderating effect test for main effects (N = 302)

Model		M7 Environmental Perception + Environmental Perception * Perceived Policy Support → Intention to Return to Hometown and Start a Business	M8 Entrepreneurial Passion + Entrepreneurial Passion * Perceived Policy Support → Intention to Return to Hometown and Start a Business
Control variables	Area	0.35***	0.30***
	Gender	0.13	0.11
	Educational background	0.1	−0.06
	Major	0	−0.03
	Risk-bearing capacity	0.15***	0.02
	Financial status	−0.1	0
	Entrepreneurial experience among family and friends	0.1	0.12
Independent variable	Perception of hometown environment	0.35***	
	Entrepreneurial Passion		0.65***
Moderating variable	Policy Support	0.25***	0.11*
Interaction term	Policy support * Perception of hometown environment	0.138*	
	Policy support * Entrepreneurial passion		0.12**
R		0.65	0.77
R ²		0.42	0.59
F		21.11	41.08

Table 8. Moderating effect of policy support

Moderating Effect	Policy Support	Effect	BootSE	t	LLCL	ULCL
Environmental Perception	M+SD	0.22	0.09	2.48	0.05	0.40
Environmental Perception	M	0.35	0.06	5.68	0.23	0.47
Environmental Perception	M-SD	0.48	0.06	8.13	0.36	0.59
Entrepreneurial Passion	M+SD	0.56	0.07	7.57	0.41	0.71
Entrepreneurial Passion	M	0.66	0.05	12.33	0.55	0.76
Entrepreneurial Passion	M-SD	0.76	0.05	15.06	0.66	0.85

Remarks: LLCL = lower limit of 95% confidence interval, ULCL = upper limit of 95% confidence interval; n=302.

Figure 3. Moderating effect of policy support on the relationship between environmental perceptions and willingness to return the hometown to start a business.

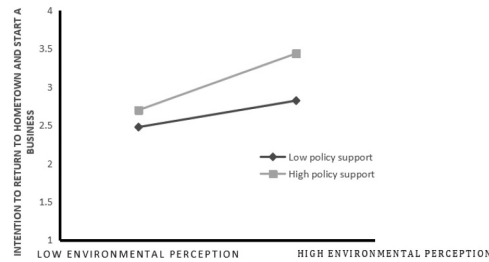
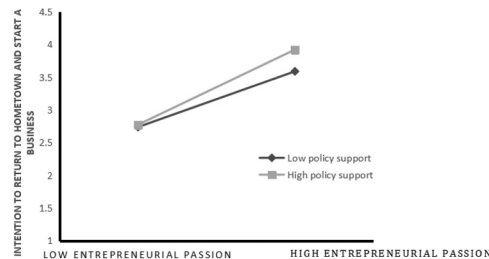


Figure 4. Moderating effect of policy support on the relationship between entrepreneurial passion and willingness to return the hometown to start a business.



Firstly, the study confirmed that environmental perception had a significant positive impact on university students' intentions to start a business in their hometowns, which aligns with previous research (Chu et al., 2021; Davis, 1993; Kiani et al., 2022; Shiri et al., 2017). Prior studies have focused on the effect of the entrepreneurial environment on entrepreneurial intentions, but have not considered the important role of entrepreneurs' environmental information processing mechanisms (Zayadin et al., 2023). In today's business environment, entrepreneurs rely heavily on their emotions and intuition, also known as "gut feelings" and "hunches" (Zollo, 2021). "gut feelings" will influence their judgment in combining, reorganizing, and evaluating the resources available in the environment, which in turn will influence entrepreneurs' judgments and decisions (Foss & Klein, 2012). By revealing the "gut feelings" of entrepreneurs and identifying how environmental perceptions influence their judgments, this study responds to calls for further contextualization of entrepreneurial research (Welter et al., 2017). Meanwhile, entrepreneurs' environmental perceptions are a reflection of past knowledge and experience and can be a summary of well-adapted organic responses (Bartlett, 1933). This study reveals the underlying framework that gives rise to differences in the final choices of potential entrepreneurs, showing a salient preference for information processing preferences.

Secondly, this study explored the mediating role of entrepreneurial passion between environmental perception and the intention to return to the hometown and start a business. The results indicated that entrepreneurial passion played a partial mediating role. Environmental perception not only directly influences students' intention to return but also influences it through the mediation of entrepreneurial passion. When entrepreneurs operate in a specific environment, the feedback they receive from the environment affects their level of entrepreneurial passion (Haynie et al., 2012). Positive emotions broaden individuals' cognitive scope, divert their attention from complex situations, and increase problem-solving capabilities (Adomako & Tran, 2023). Studies in cognitive psychology have emphasized the importance of metacognitive abilities in predicting emotions across activities (Hede, 2010; Perlovsky, 2006), which is proved by our study. Individuals perceive information about their environment in a way that enables them to infer, envision, seek input, integrate feedback, and adapt to the capabilities and resources in their environment. Such perceptual ability can influence an individual's emotions about creating, developing, and inventing products and businesses (O'Shea et al., 2017; Stenholm & Nielsen, 2019). By understanding individuals' perceptions of their environments, the emotional experience of individuals during innovation and entrepreneurship can be understood more deeply, as well as their ability to react and adapt in the face of environmental change.

Moreover, considering the specific identity of students, their intention to return to their hometowns and start businesses heavily relies on government support. This study highlighted the moderating role of policy support in the relationships between environmental perception and the intention to return to the hometown, as well as between entrepreneurial passion and the intention to return to the hometown. Increased government participation in entrepreneurial initiatives and support for enterprises reduce risks and mitigate negative environmental impacts (Brooks, 2021; Vatavu et al., 2022). Additionally, policy support can contribute to the accumulation of personal resources by promoting entrepreneurial passion, in terms of optimizing the material resources needed for entrepreneurship as well as psychological resources such as entrepreneurial confidence and resilience (Hu et al., 2022). Consequently, university students tend to have more confidence in starting a business in their hometowns, leading to a significant increase in their intention to return.

6. Theoretical implications

Firstly, this study explores the impact of environmental perception on the willingness to return to the hometown to start a business and provides a systematic theoretical reference for subsequent research. In the field of entrepreneurship research, researchers have long recognized the key role of entrepreneurs in the entrepreneurial process. A majority of such literature has focused on understanding entrepreneurs' personalities and traits (Laouiti et al., 2022) and backgrounds (Bergmann et al., 2016) in order to identify the factors that enable them to engage in entrepreneurial practices. However, our understanding of entrepreneurs and what makes them pursue entrepreneurship remains incomplete (Karimi, 2020). Some analysis of environmental perception and entrepreneurial passion focuses more on the personal perceptions of entrepreneurs. This study shifts the research horizon to the cognitive processing of entrepreneurs to understand how and why entrepreneurs think, decide, and act differently. This study provides an important reference for empirical research on the relationship between environmental perception, entrepreneurial passion, and willingness to return to the hometown to start a business.

Secondly, this is the first academic attempt to establish a link between environmental perception and entrepreneurial passion, which aims to explore differences in entrepreneurial passion among novice entrepreneurs in different entrepreneurial environments. Drawing from the perspective of appraisal theories of emotion, this study reveals the positive effect of the entrepreneurial environment as an external stimulus on the unique emotion of entrepreneurs (entrepreneurial passion). This research enriches the understanding of the antecedents of entrepreneurial passion, demonstrates the value of passion in entrepreneurship, and extends the boundaries of theories on entrepreneurship.

Thirdly, based on the person-environment fit theory, this study examines the effect of environmental perception on the willingness to return to the hometown to start a business and entrepreneurial passion from an individual cognitive perspective. Applying the person-environment fit theory from the fields of management and psychology to the field of entrepreneurship is an attempt to integrate the fields, as well as an extension and a test of this theory. Moreover, the personal knowledge, experience, and abilities of university students, combined with their assessment of the environment, will influence their entrepreneurial passions and beliefs and facilitate their readiness to take entrepreneurial action (Dionne et al., 2018). Understanding the mindset is therefore crucial to the study of entrepreneurship theory. Our findings provide preliminary evidence for the importance of entrepreneurial cognition in the entrepreneurial choices of university students.

7. Practical implications

Based on the findings, several suggestions could be proposed. Firstly, this study provides evidence of the significant impact of policy support on university students' intention to return to their hometowns and start businesses. Starting a business requires substantial capital, manpower, and material resources, which often pose a major obstacle for university students (Hosseini et al., 2022). The Chinese government has implemented various policies to

encourage university students to return to their hometowns and start businesses. However, due to limited social experience and information channels, students may not be fully aware of these policies and their benefits. Therefore, when formulating entrepreneurial policies, it is crucial for the government and relevant departments to consider both established businesses and the specific needs of start-ups and potential entrepreneurs (university students). Furthermore, effective communication of these policies through multiple channels is necessary to ensure that university students understand the government's role and support in promoting entrepreneurship.

Secondly, this study highlights the potential of the social environment in fostering entrepreneurship. Local governments should align regional economic development plans, local resource endowments, and entrepreneurial industries to create a robust industrial structure that stimulates new momentum for local economic growth. This can be achieved through the enhancement of infrastructure, public services, and the cultivation of an entrepreneurial culture and atmosphere, providing a conducive environment for university students to start businesses in their hometowns. Additionally, fostering cooperation and exchanges between urban and rural areas, educational institutions, and local communities is recommended. Systematic training programs should be implemented for students intending to return to their hometowns, and multi-party cooperation should be encouraged to facilitate the flow of entrepreneurial resources and mitigate the disparities in resource distribution caused by urban-rural gaps. The objective is to provide targeted services and support for university students and enhance the appeal of the hometown environment for aspiring entrepreneurs.

Thirdly, it is essential for relevant departments to prioritize the cultivation of entrepreneurial passion among university students and strengthen guidance and support for starting businesses in their hometowns. It is suggested to set examples by commending and rewarding entrepreneurs who return to their hometowns, enhance positive feedback, stimulate enthusiasm for returning to their hometowns, organize regular entrepreneurial internships in their hometowns, and strengthen their understanding of their hometowns through diverse activities. These measures will promote their sense of belonging to their hometowns and encourage them to actively participate in grass-roots construction, ultimately taking root accordingly. The social values and norms of the entrepreneurs and their acquaintances have a direct impact on university students' intentions to start a business (Shan & Tian, 2022). Therefore, it is necessary to emphasize the local entrepreneurial environment, improve the social identity of entrepreneurs, increase social tolerance toward failure, and strengthen policy communication through various channels. These efforts will provide favorable conditions to encourage their return.

8. Limitations and future lines of research

Nevertheless, there are certain limitations in this study. First of all, the sample only consisted of junior students and above rather than students from all years. The authors believed that senior students tend to have more clearly defined future plans. Future research should aim to expand the sample size and include a broader range of students to enhance the representativeness of the findings. Secondly, entrepreneurial passion may vary at different stages of entrepreneurship. This study utilized cross-sectional data, which does not capture the impact of dynamic changes in entrepreneurial passion on students' intention to return to their hometowns and start businesses. Future research is recommended to incorporate qualitative methods to analyze the mechanisms behind changes in entrepreneurial intention at different stages of entrepreneurial passion. Third, the participants in this study were Chinese university students. China's economic development and national policies have created a conducive environment for innovation and entrepreneurship among university students. However, the political environment may vary across different regions. Future studies should explore the influence of policies and the overall environment on university students' entrepreneurial intentions in different regions.

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Author contributions

DJ and RQ designed the study, revised the manuscript, collected, and analyzed the data. RQ provided the original manuscript. Both authors contributed to the article and approved the submitted version.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Ethical statement

The protocol was approved by Institutional Review Board at School of Innovation and Entrepreneurship, Wenzhou University of Technology (No.ES2022006). The authors promise that the study adhered to the tenets of the Declaration of Helsinki.

Supplemental data

Supplemental data for this article can be accessed online at <https://doi.org/10.1080/23311975.2023.2288720>

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