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How Entrepreneurial Self-Efficacy Promotes Part-Time Entrepreneurial Behavior: The Moderating Role of Entrepreneurial Resources

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Abstract: With the convergence of China's "entrepreneurial society" and the "digital age", part-time entrepreneurial behavior (PEB) has received widespread attention as a new form of labor relations and entrepreneurial paths. Entrepreneurial self-efficacy (ESE) is an important indicator of entrepreneurs' confidence in their skills and in coping with uncertain entrepreneurial challenges. However, studies on how ESE affects different types of PEB have not been thoroughly carried out. To fill the existing research gap, the primary objective of this paper is to thoroughly investigate the individual impact of three key factors, namely organizational management self-efficacy (OMSE), opportunity development self-efficacy (ODSE), and risk-taking self-efficacy (RTSE), on economic profit-driven part-time entrepreneurial behavior (EPEB) and self-value-driven part-time entrepreneurial behavior (SPEB), respectively. Based on the "cognition-environment-behavior" logic of triadic reciprocal determinism, this study also aims to examine the moderating effect of entrepreneurial resources (ERs) and attempt to understand how external factors regulate internal factors (OMSE, ODSE, and RTSE) to form the results of EPEB and SPEB. This study adopted a quantitative research approach with a questionnaire survey, taking 457 part-time entrepreneurs in 11 major cities as subjects. The main results show that (1) OMSE and ODSE have a positive effect on EPEB, while RTSE has an inverted U-shaped effect on it; (2) ODSE and RTSE have a positive effect on SPEB, and OMSE has an inverted U-shaped effect on it; and (3) ERs play a positive moderating role in the above processes. The results can not only effectively guide part-time entrepreneurs in PEB but also provide a reference for the government to improve part-time entrepreneurship policies.

Keywords: part-time entrepreneurial behavior; entrepreneurial self-efficacy; entrepreneurial resources; triadic reciprocal determinism

Citation: Sun, J.; Zhao, Y.; Wu, S.; Zhou, Y. How Entrepreneurial Self-Efficacy Promotes Part-Time Entrepreneurial Behavior: The Moderating Role of Entrepreneurial Resources. *Sustainability* **2023**, *15*, 13058. https://doi.org/10.3390/su151713058

Academic Editors: Marc Dressler, Ivan Paunović, Coralie Haller and Tatjana Mamula Nikolić

Received: 14 August 2023
Accepted: 28 August 2023
Published: 30 August 2023

1. Introduction

China's economy is under increasing downward pressure, and many people are facing financial and non-financial difficulties. Part-time entrepreneurial activities have emerged as an effective way to alleviate these challenges. According to the report of GEM (Global Entrepreneurship Monitor), about 80% of nascent entrepreneurs are part-time entrepreneurs [1]. Folta et al. used the data from Statistics Sweden to empirically analyze the importance of part-time entrepreneurship in promoting public entrepreneurship [2]. Based on a survey of 1463 people with three or more years of employment experience conducted by China Talent, nearly 70% of respondents indicated that they did not exclude the possible implementation of part-time entrepreneurship [3]. In addition, the policy for part-time entrepreneurship in China has also improved. For example, the State Council of China has issued "Several Opinions on Supporting the Expansion of Employment, Stabilizing Jobs, and Increasing Income (2020)", which clearly proposes to provide business premises for street vendors and encourage the "Stall Economy" (a market economy where employees do business by setting up stalls on the streets in their spare time), a facilitative way of

part-time entrepreneurship in China [4]. China's Ministry of Human Resources and Social Security has issued the "Guidance on Further Supporting and Encouraging Innovation and Entrepreneurship among Researchers in Institutions (2020)", which emphasizes the encouragement of experts and specialists in various fields to start their own businesses on a part-time basis [5].

Although the policy landscape surrounding part-time entrepreneurship improves, part-time entrepreneurs are still confronted with a variety of practical difficulties in the entrepreneurial process that may affect the outcomes of their activities [6]. For example, limited time and energy can be devoted to entrepreneurial activities since part-time entrepreneurs are still attached to their wage employment. Also, it is difficult for part-time start-ups to fully gain the trust and support of the venture capital and sales markets in a short period of time, resulting in limited access to these ERs [3]. In this context, the importance of ESE, as the collection of the entrepreneur's will and self-belief in management, resilience, and goal accomplishment [7], has become increasingly pronounced and recognized. ESE influences not only entrepreneurial intentions and efforts but also competence acquisition and resilience in the face of difficulties. Furthermore, it is more difficult for part-time start-ups to fully gain the trust and support of the venture capital and sales markets in a short period of time, resulting in relatively tricky access to REs such as technology and finance [3]. Therefore, focusing on improving the ESE and ERs of part-time entrepreneurs can efficiently affect PEB.

Studies on part-time entrepreneurship emerged around 2010, focusing on the behaviors of part-time entrepreneurs [2,8], and then expanding to individuals' characteristics such as age and gender [8–10]. Later on, PEB was grouped into two types, EPEB and SPEB, based on differences in motivation [11]. The EPEB primarily targets material wealth, while the SPEB primarily targets non-material aspects such as interests and lifestyle. Self-efficacy, proposed by psychologist Bandura in the 1970s, refers to an individual's belief in his/her own abilities to perform various skills that are needed for implementing behavior [12]. The essence of ESE is the evaluation of entrepreneurs' ability to master various skills required for entrepreneurship as well as to achieve entrepreneurial goals and positioning [13]. The evaluation results of ESE in objective ERs will directly affect entrepreneurial behavioral decision-making [14]. However, studies on how ESE affects different types of PEB have not been thoroughly carried out, nor have they taken into account the regulatory role of ERs as important entrepreneurial conditions. Accordingly, it is critical to explore in depth the ESE and ERs for PEB, as well as how to align entrepreneurial conditions with entrepreneurial needs. Such an investigation is fundamental to enhancing the success rate of part-time entrepreneurship.

To fill the existing research gap, this paper collected part-time entrepreneurship data from 11 major cities in three regions (East, Central, and West) of China to conduct quantitative research by using the "cognition-environment-behavior" model of triadic reciprocal determinism. This theory was first proposed by American psychologist Robert Freud in the 1950s and used for the determinants of human behavior [15]. Both the entrepreneur's internal ESE (cognition) and external ERs (environment) inevitably produce certain stimuli or instructions for PEB (behavior). This process is in line with the concept of "cognition-environment-behavior", which is a suitable model for analyzing the mechanisms of ESE and ERs on PEB.

The remaining parts of this paper are arranged as follows: Section 2 is the literature review for ESE, ERs, and PEB, respectively. The research hypotheses and conceptual model based on the literature review and theoretical analysis are proposed in Section 3. Section 4 provides data and methodology, including a research sample and a variable design. The empirical tests are arranged in Section 5, including pre-empirical tests, descriptive statistics, correlation analyses, and regression analyses. Section 6 provides a research discussion where the empirical results are explored. The conclusions and implications are in Section 7. Section 8 explains the limitations of the study.

2. Theoretical Foundation and Literature Review

2.1. Theoretical Foundation

This research is based on the Triadic Reciprocal Determinism, which uses the logic of "cognition-environment-behavior" to explain the origin of various human behaviors in social situations [16]. Individual behavioral decision-making is influenced by subjective cognitive factors and objective resource conditions [17]. Therefore, this study believes that exploring ESE (cognition factors) and the role of ERs (environment factors) can comprehensively focus on the necessary prerequisites for the implementation of part-time entrepreneurship (behaviors) [15]. This study is also based on the concept of sustainable development, emphasizing the benefits of existing resources and achieving sustainable development in PEB.

2.2. Literature Review

Entrepreneurial behavior is the action taken by the entrepreneur to reach desired goals [16]. PEB is a special type of entrepreneurial behavior that differs from general entrepreneurial behaviors due to the occupancy of current employment during the implementation of entrepreneurship. Due to the significant differences in focus between part-time and general entrepreneurial behaviors, no further discussion was dedicated to the latter in this paper. Regarding PEB, research mainly focuses on its connotation, motivations, and characteristics. (1) In terms of connotation, from the perspective of co-existing forms of entrepreneurship and employment, PEB is considered a form of entrepreneurial behavior in which individuals retain regular employment while implementing entrepreneurial activities [18,19]. From the perspective of time allocation, PEB is seen as a form of entrepreneurial behavior in which individuals use a certain amount of time for stable employment and another part of time for self-employment [20]. However, due to the large impact of industry differences on time allocation [21], the time allocation perspective is less actionable in general regularity studies. From the perspective of income share, PEB is seen as a form of entrepreneurial behavior in which entrepreneurial income is less than half of the total income [22]. This perspective is limited as well due to the dynamic nature of entrepreneurial income. Therefore, this paper follows the definition of PEB from the perspective of co-existing forms of entrepreneurship and employment. (2) In terms of motivations, the dimensional division of PEB revolves around entrepreneurial motivation. Petrova et al. considered that individual characteristics, especially psychological orientation, are important influencing factors on individual entrepreneurial motivation and classified the types of PEB into two categories: economic motivation and value motivation [11]. Obey et al. believed that the types of part-time entrepreneurship can be distinguished based on entrepreneurial motivations such as social cognition, financial success, innovation, or independence [23]. Thorgren et al. proposed a two-dimensional model of part-time entrepreneurial motivation as survival-driven and career-driven, measuring survival-driven by dissatisfaction with salary income, etc., and career-driven by achievement recognition, etc. [14]. (3) In terms of characteristics, Block and Landgraf stated that most part-time entrepreneurs are female, and they are more likely to focus on their families [24]. Caitlin showed that the age distribution of the group of part-time entrepreneurs is less distinctive than that of full-time entrepreneurs [25]. Folta et al. found that part-time entrepreneurs are reluctant to take larger risks and tend not to rate themselves highly [3]. However, existing research mainly focuses on the simple induction of part-time entrepreneurial motivation and individual characteristics rather than combining entrepreneurial motivations and individual characteristics with the heterogeneity of different types of PEB. In addition, the specific pathways also deserve further exploration.

The current research on ESE mainly focuses on the composition and outcome variables. (1) In terms of structure, the majority of literature considers ESE to include organizational self-efficacy, opportunity self-efficacy, and risk self-efficacy [25]. Organizational self-efficacy refers to an individual's confidence in running the entrepreneurial organization and in allocating resources for optimal output [26]; Opportunity self-efficacy means that individ-

uals have the confidence to analyze, tap, and exploit markets [27,28]. Risk self-efficacy is the confidence to identify, prevent, and resolve entrepreneurial risks in an uncertain environment [29,30]. (2) In terms of outcome variables, most research has focused on entrepreneurial intention. Luc et al. mentioned in their study that ESE has a significant positive effect on part-time entrepreneurial intentions [31]. Individuals with low ESE tend to test their entrepreneurial ideas through PEB [32]. Tian et al. proposed that the core ESE of migrant workers negatively moderates the relationship between job security and part-time entrepreneurial intentions [33]. It is clear that both ESE and PEB are a combination of multiple dimensions; however, the heterogeneity of the impact of different dimensions of entrepreneurial efficacy on PEB across different motivational types has not been explored in depth.

The existing literature on ERs has mainly explored their dimensions and outcome variables. (1) In terms of dimensions, Ziyae et al. focused on studying ERs as a single dimension of capital investment [34]. As the research continuously develops, scholars start to consider ERs as variables that contain multiple dimensions. For example, Xu distinguishes two dimensions, intangible and tangible resources, based on the different forms of ERs [35]. Marks et al. argued that ER could be classified at three levels: core, basic, and other, based on the value of resources [36]. Xu et al. pointed out that core resources include three dimensions of management, human, and technology, and basic resources include two dimensions of capital and venue [37]. (2) In terms of outcome variables, previous studies have mainly dealt with entrepreneurial motivation, ESE, and entrepreneurial performance. Sun et al. argued that ERs play a role in entrepreneurial motivation [38]. Rui and Shi found that ERs can motivate migrant entrepreneurs to acquire higher beliefs, achieve higher entrepreneurial goals, and enhance entrepreneurial performance [39]. Although scholars have conducted rich research on ERs, the discussion of the effects of various types of ERs on PEB across heterogeneous motivational types is relatively rare. In addition, as an important carrier, the transmission role of ERs in the influence of ESE on PEB is worth exploring.

In summary, PEB is a complex process of economic activity in which behavioral decisions are influenced by multiple factors. However, its research framework has not been fully recognized [25,40]. Firstly, although scholars have tried to discover more characteristics of PEB based on different perspectives and approaches, the pathway to implementing PEB remains unexplored. Secondly, most research focuses on general entrepreneurial behaviors; fewer studies analyze the specific role of ESE and ER in influencing PEB. Thirdly, the role of ERs under the ESE perspective in the decision-making process of part-time entrepreneurs with different motivations has not been deeply explored. Therefore, this study aims to fill these gaps by examining the relationship between ESE, ERs, and PEB so as to enrich existing theories in the part-time entrepreneurship field, guide PEB, and optimize part-time entrepreneurial policies.

3. Hypotheses and Model

Since Petrova et al.'s model groups entrepreneurial motivation into economic-profit and self-value types [11], it has been widely recognized and used by other scholars [41,42]. This paper follows this categorization and classifies PEB into two types: EPEB and SPEB. EPEB focuses on entrepreneurs who are not satisfied with employment income and want to achieve higher economic returns. SPEB focuses on entrepreneurs who want to pursue personal aspirations, enhance competencies, make lifestyle changes, realize life values, etc.

3.1. ESE and EPEB

ESE, as a psychological state and cognitive characteristic of entrepreneurs, is a key indicator of entrepreneurial behavior and predicts entrepreneurial success [43]. Compared to survival-driven entrepreneurs in general, economic profit-driven part-time entrepreneurs are more often in financial difficulties in the context of limited energy, entrepreneurial

experience, and ERs [44]. At this point, ESE can enhance entrepreneurs' confidence and drive them to implement PEB. Based on the above, Hypothesis 1a was proposed:

Hypothesis 1a (H1a). *ESE has a significant positive effect on EPEB.*

ESE may also affect PEB inversely at a certain point. Individuals with high ESE are not more inclined to engage in part-time entrepreneurship, but in full-time entrepreneurship instead. The effect of ESE on PEB shows a process of promotion followed by inhibition. When ESE is relatively low, individuals are more likely to initiate part-time entrepreneurship because part-time entrepreneurship can offer individuals the opportunity to enhance their entrepreneurial skills and test their business ideas through "learning by doing" with lower entrepreneurial costs and failure risks [45,46]. When individuals believe that their ESE exceeds a certain threshold and anticipate higher expected returns from entrepreneurship than from wage employment, they will give up employment for full-time entrepreneurship to transform ESE into economic benefits [47].

The above analysis illustrates that there is an interval effect of ESE on PEB; that is, individuals with lower ESE are more inclined to start PEB. In addition, when individuals' employment income is low, the ESE threshold for giving up part-time entrepreneurship for full-time entrepreneurship is lower. When individuals' employment income is higher, the ESE threshold for giving up part-time entrepreneurship for full-time entrepreneurship is higher. Only individuals with a strong sense of ESE will give up employment and fully engage in full-time entrepreneurial activities. Otherwise, they will continue part-time entrepreneurship. Hence, the effect of ESE on EPEB is an inverted U-shaped relationship, initially promoting and then constraining. Based on the above, Hypothesis 1b was proposed:

Hypothesis 1b (H1b). *ESE has a significant inverted U-shaped effect on EPEB.*

3.2. ESE and SPEB

Self-value-driven part-time entrepreneurs are not only interested in financial income but also in achieving non-economic goals. They focus on the pursuit of new development ideas, good living conditions, interesting experiences, and recognition [12]. At this point, the actions of part-time entrepreneurs are mainly driven by internal motivations and are more likely to demonstrate greater initiative. In addition, PEB can be seen as a practice of caution and steadiness prior to full-time entrepreneurship by these self-value-driven part-time entrepreneurs [48]. Based on the mature Entrepreneurship Self-Efficacy Scale (ESES) developed by Fuller et al. [49] and Yu et al. [50], ESE is divided into three key aspects: organizational self-efficacy, opportunity self-efficacy, and risk self-efficacy. In this context, organizational self-efficacy can increase individuals' confidence in controlling the operation of entrepreneurial organizations. Opportunity self-efficacy can enhance individuals' motivation to grasp and transform market opportunities. Risk self-efficacy can enhance individuals' ability to predict and respond to risks [51]. Thus, ESE can increase the probability of achieving self-valued entrepreneurial goals and drive individuals to engage in part-time entrepreneurship. Based on the above, Hypothesis 2a was proposed:

Hypothesis 2a (H2a). *ESE has a significant positive effect on SPEB.*

Similarly, with the improvement of organizational self-efficacy, opportunity self-efficacy, and risk self-efficacy, the expected return of PEB set by individuals also increases [52]. Thus, ESE is a strong assurance of the increasing success rate of part-time entrepreneurship. However, when the expected performance of PEB exceeds expectations or when the expected value benefits from PEB are higher than wage employment, too much or too little input in part-time entrepreneurship will both reduce the total benefits from entrepreneurial activities and wage employment [53]. In this scenario, individuals prefer to move directly from employment to full-time entrepreneurship, i.e., to devote all their

energy to entrepreneurship, in order to maximize the value–utility of economic activities. Therefore, the effect of ESE on SPEB also shows an inverted U-shaped relationship that first promotes and then inhibits. Based on the above, Hypothesis 2b was proposed:

Hypothesis 2b (H2b). *ESE has a significant inverted U-shaped effect on SPEB.*

3.3. The Moderating Role of ERs

ERs can increase the expected wealth returns of part-time entrepreneurship, reduce individual concerns, promote entrepreneurial confidence, and enable entrepreneurs to decisively carry out part-time entrepreneurship [1,54–56]. Based on this, resource conditions can strengthen the role of ESE, enhance entrepreneurial confidence and willingness, and stimulate individuals to pursue economic profit and self-value by engaging in part-time entrepreneurship [57]. Therefore, ERs can strengthen PEB among those with weaker ESE [58] and stimulate full-time entrepreneurial enthusiasm among those with higher ESE. Therefore, the inverted U-shaped effect of ESE on economic-profit-driven or self-value-driven PEB is positively strengthened. Therefore, ERs can play a moderating role in these two impact pathways of ESE on PEB. Based on the above, hypotheses 3a and 3b were proposed:

Hypothesis 3a (H3a). *ERs have a positive moderating effect on the relationship between EPEB.*

Hypothesis 3b (H3b). *ERs have a positive moderating effect on the relationship between SPEB.*

To clearly demonstrate the relationship between ESE, ERs, and two types of PEB, this study constructs a conceptual model and a theoretical framework based on the logic of "cognition-environment-behavior" of triadic reciprocal determinism, as shown in Figures 1 and 2.

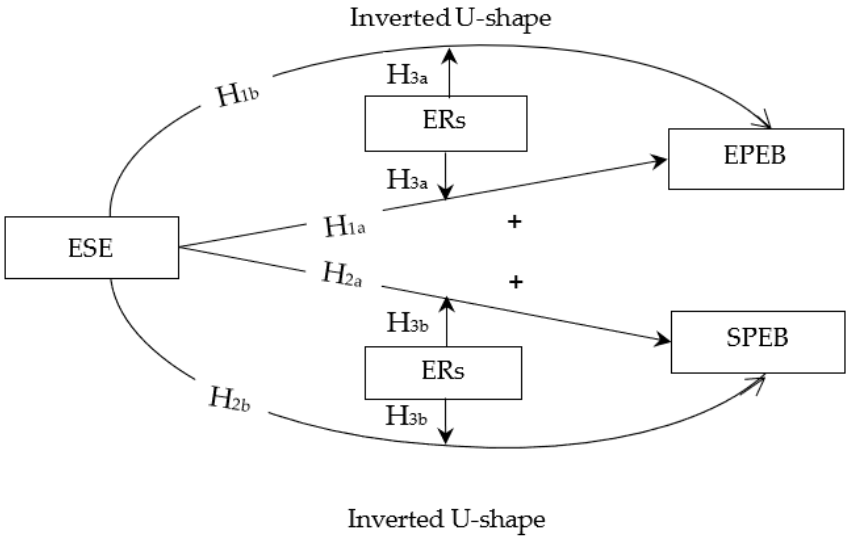

Figure 1. Conceptual model of ESE, ERs, and PEB.

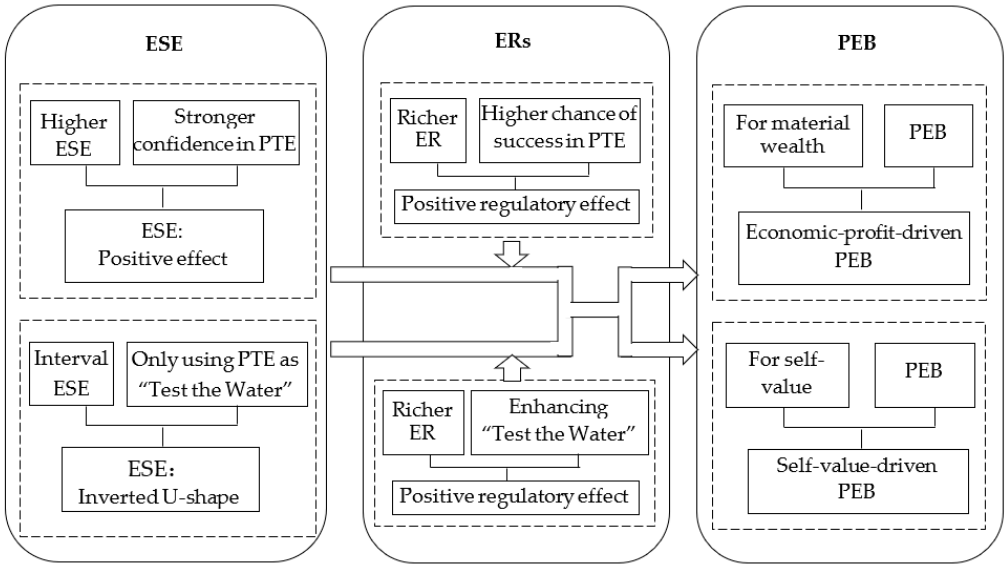

Figure 2. Theoretical framework of PEB based on Triadic Reciprocal Determinism.

4. Data and Methodology

4.1. Research Sample

This study is a quantitative deductive study. It uses a stratified sampling method to collect data through a questionnaire form [59]. The questionnaire was distributed to 18 developed cities such as Chengdu, Lanzhou, Zhengzhou, Harbin, Nanjing, Shenzhen, etc., covering the eastern, central, and northwestern regions of China, from July 2020 to September 2021. The respondents are part-time entrepreneurs, including B2B forms of businesses such as Didi Taxi drivers, online shop owners, university teachers who also cater to entrepreneurship, business incubator parks, etc. After excluding invalid questionnaires (answers concentrated in the same numerical value and highly regular), 457 valid questionnaires were collected. The sampling subjects were classified in gender, age, academic qualifications (AQ), entrepreneurial experience (EE), obtain employment enterprise scale (OEES), entrepreneurial enterprise scale (EES), entrepreneurship years (EY), job satisfaction (JS), leisure value appeal (LVA), employment enterprise management personnel (EEMP), obtain employment enterprise industry (OEEI), entrepreneurial enterprise industry (EEI), and employment and entrepreneurship industries are Similar (EEIS), as shown in Table 1.

Table 1. Sample Status Description.

Variable	Variable Name	Classified Items	Frequency	Percentage
Gender	Gender	Male	309	67.61
		Female	148	32.39
Age	Age	18–24 years old	58	12.69
		25–34 years old	132	28.89
		35–44 years old	183	40.04
		45–54 years old	65	14.22
		55+ years old	19	4.16
AQ	Academic Qualifications	Below junior college	187	40.92
		Junior college and above	270	59.08
EE	Entrepreneurial Experience	Yes	193	40.47
		No	264	57.77
OEES	Obtain Employment Enterprise Scale	1–20 people	211	21.6
		21–50 people	230	23.5
		50–100 people	338	34.6
		More than 100 people	197	20.2

Table 1. *Cont.*

Variable	Variable Name	Classified Items	Frequency	Percentage
EES	Entrepreneurial Enterprise Scale	1–20 people	664	68.03
		21–50 people	212	21.72
		50–100 people	69	7.07
		More than 100 people	31	3.18
EY	Entrepreneurship Years	8 years and less	741	75.92
		More than 8 years	235	24.08
JS	Job Satisfaction	Very satisfied	26	5.69
		Relatively satisfied	45	9.85
		Generalization	137	29.98
		Relatively dissatisfied	187	40.92
		Very dissatisfied	62	13.57
LVA	Leisure Value Appeal	Very necessary	36	8.09
		Relatively necessary	91	19.98
		Generalization	133	29.00
		Relatively unnecessary	174	38.01
		Very unnecessary	22	4.92
EEMP	Employment Enterprise Management Personnel	Yes	146	31.95
		No	311	68.05
OEEI	Obtain Employment Enterprise Industry	Service industry	255	55.80
		Retail industry	123	26.91
		Manufacturing industry	64	14.00
		Agriculture	15	3.28
EEI	Entrepreneurial Enterprise Industry	Service industry	237	51.86
		Retail industry	138	30.20
		Manufacturing industry	55	12.04
		Agriculture	27	5.91
EEIS	Employment and Entrepreneurship Industries are Similar	Yes	292	63.89
		No	165	36.11

4.2. Variable Design

The questionnaire focused on four variables: EPEB, SPEB, ESE, and ER. Each question had a Likert scale with five possible responses, with "1–5" denoting a range from not at all (very disagree) to fully (very agree). The scales employed in this investigation were developed from validated scales to assure the instrument's validity and reliability [60]. The specific scales are shown in Table 2.

4.2.1. Dependent Variable—Part-Time Entrepreneurial Behavior (PEB)

Drawing on the mature scales of Petrova et al. [11] and Sun et al. [52], this study divided PEB into economic-profit-driven part-time entrepreneurial behavior (EPEB) and self-value-driven part-time entrepreneurial behavior (SPEB) based on the type of entrepreneurial motivation. EPEB is measured by poor economic conditions, low satisfaction with employment income, and the expectation of achieving wealth freedom. SPEB is measured by pursuing life goals, changing lifestyles, and gaining a sense of honor.

4.2.2. Independent Variable—Entrepreneurial Self-Efficacy (ESE)

ESE is based on Fuller et al.'s [49] and Yu et al.'s [50] Entrepreneurial Self-Efficacy Scale (ESES), and ESE is divided into three key aspects. Organizational management self-efficacy (OMSE), which emphasizes self-perceptions of entrepreneurial confidence, goal achievement, and entrepreneurial leadership; opportunity development self-efficacy (ODSE), which emphasizes self-perceptions of interpersonal coordination, business opportunity exploitation, and learning ability; and risk-taking self-efficacy (RTSE), which emphasizes self-perceptions of willfulness and coping with uncertainty.

Table 2. Measurement Question Scale Structure.

Primary Dimension	Secondary Dimension	Code	Measurement Item
PEB	EPEB	EPEB1	Entrepreneurial behavior is mainly aimed at matching economic conditions with daily needs;
		EPEB2	Entrepreneurial behavior is mainly aimed at improving material living conditions;
		EPEB3	Entrepreneurial behavior is mainly aimed at pursuing more wealth accumulation.
	SPEB	SPEB1	Entrepreneurship is mainly aimed at experiencing interests and hobbies;
		SPEB2	Entrepreneurship is mainly aimed at pursuing the desired lifestyle;
		SPEB3	Entrepreneurship is mainly aimed at achieving higher life ideals.
ESE	OMSE	OMSE1	I am able to set appropriate organizational development goals;
		OMSE2	I am able to develop and implement operational strategies for various departments of the organization;
		OMSE3	I am able to utilize my resources to achieve maximum benefits.
	ODSE	ODSE1	I am able to keenly identify products that consumers may potentially need;
		ODSE2	I am able to identify and evaluate the quality and potential of business opportunities;
		ODSE3	I am able to leverage business opportunities to achieve maximum benefits.
	RTSE	RTSE1	I am able to work under continuous pressure and conflict;
		RTSE2	I am able to identify and prevent potential risks in the enterprise in advance;
		RTSE3	I am able to take on and solve entrepreneurial risks and difficulties.
ERs	HRs	HRs1	I possess learning ability and creativity;
		HRs2	I have an excellent entrepreneurial team;
		HRs3	I am good at recruiting high-quality talents from outside.
	FRs	FRs1	Adequate own capital at the start-up;
		FRs2	Adequate and flexible subsequent investment assets;
		FRs3	I have diversified financing channels;
		FRs4	I have access to access abundant external funding.
	TRs	TRs1	I have technology projects and achievements;
		TRs2	I have accumulated professional technical knowledge;
		TRs3	I have access to external technological assistance.
	MRs	MRs1	I have access to information on competitors, markets, and demand;
		MRs2	I have access to diversified sales channels;
		MRs3	I have a team skilled in exploring markets.

4.2.3. Moderating Variable—Entrepreneurial Resources (ERs)

The ERs mainly referred to the scales that have been proven to have good reliability and validity by Huang [61], Zhu, and Li [62], combined with the traits and behavioral characteristics of part-time entrepreneurs, and covered resources that can be obtained directly, such as financial resources (FRs) and human resources (HRs), as well as resources that need to be obtained indirectly, such as technical resources (TRs) and market resources (MRs). The specific scales are shown in Table 2.

5. Empirical Tests

5.1. Pre-Empirical Tests

SPSS 26.0 and AMOS 22 were used to conduct the pre-empirical test of the data. First, the KMO value of each variable is greater than 0.7 (see Table 3), and Bartlett's spherical test was significant, which indicated that the data is suitable for factor analysis [63].

Second, Harman's single-factor test was applied to examine common method bias (CMB) [64,65]. The variable explained by the first factor was 21.82%, which is significantly below the 50% threshold [65]. Thus, there was no serious problem with CMB.

Third, Cronbach's alpha was estimated to ensure the internal consistency of the three constructs [66]. In Table 3, the Cronbach's alpha value of each construct was from 0.845 to 0.933, which is higher than 0.75. Thus, the measures have sufficient reliability.

Fourth, confirmatory factor analysis (CFA) was used to evaluate the convergent and discriminant validity of measurement, which is suitable for analyzing mature scales [63]. In Table 3, the factor loading values were over 0.6 (0.711 to 0.896), the composite reliability (CR) values were over 0.7 (0.732 to 0.896), and the average variance extracted (AVE) values were over 0.5 (0.531 to 0.637), which illustrated sufficient convergent validity.

In addition, this paper followed the methods of Ref. [66] and Ref. [67] to examine the discriminant validity. If the square root of the average variance extracted (AVE) value is higher than the surrounding correlation, that displays discriminant validity. In Table 4, the square root of the AVE values was larger than the correlation coefficient (bold mark). Also, the heterotrait–monotrait (HTMT) ratio between latent and observable variables should be less than 0.85. The test results are shown in Table 5. The HTMTs between latent and observable variables are less than 0.85. Therefore, showing discriminant validity was ensured.

Table 3. Measurement Model Results.

Variables	Dimension	Code	Factor Loading	KMO	Cronbach's Alpha	AVE	CR
PEB	EPEB	EBPE1	0.896	0.754	0.868	0.632	0.732
		EBPE2	0.859				
		EBPE3	0.834				
	SPEB	SVPE1	0.818	0.813	0.845	0.605	0.859
		SVPE2	0.825				
		SVPE3	0.729				
ESE	OMSE	OMSE1	0.727	0.802	0.916	0.619	0.766
		OMSE2	0.835				
		OMSE3	0.809				
	ODSE	ORSE1	0.820	0.847	0.858	0.584	0.875
		ORSE2	0.836				
		ORSE3	0.841				
	RTSE	RTSE1	0.711	0.782	0.933	0.531	0.794
		RTSE2	0.728				
		RTSE3	0.840				

Table 3. *Cont.*

Variables	Dimension	Code	Factor Loading	KMO	Cronbach's Alpha	AVE	CR
ERs	HRs	HRs1	0.739	0.863	0.852	0.637	0.810
		HRs2	0.716				
		HRs3	0.772				
	FRs	FRs1	0.818	0.886	0.857	0.602	0.803
		FRs2	0.825				
		FRs3.	0.729				
		FRs4	0.714				
	TRs	TRs1	0.896	0.790	0.881	0.579	0.781
		TRs2	0.859				
		TRs3	0.834				
	MRs	MRs1	0.737	0.833	0.879	0.590	0.896
		MRs2	0.765				
		MRs3	0.741				

Table 4. The Square Root of AVE.

Variables	Correlation Coefficient			
	EPEB	SPEB	ESE	ERs
EPEB	**0.844**	-	-	-
SPEB	0.668	**0.853**	-	-
ESE	0.645	0.780	**0.926**	-
ERs	0.727	0.749	0.783	**0.919**

Note: The bold on the diagonal is the square root of the AVE values.

Table 5. HTMT among Latent and Observable Variables.

Latent Variables	Correlation Coefficient			
	EPEB	SPEB	ESE	ERs
EPEB	-	-	-	-
SPEB	0.314	-	-	-
ESE	0.486	0.229	-	-
ERs	0.400	0.240	0.793	-

5.2. Descriptive Statistics and Correlation Analysis

Descriptive statistics and Pearson correlation analysis were conducted on all variables: EPEB, SPEB, ESE, and ERs, as well as the control variables (gender, age, academic qualifications, etc.). The results are shown in Table 6. It illustrates that there is a significant correlation between the measured variables. Based on Kyusang et al. [68], the coefficient between two variables is lower than 0.75, indicating no multi-collinearity problem. The above results provided support for the subsequent hypothesis testing.

5.3. Direct Effect of ESE

Stepwise regression analysis [69] was used to test whether different types of ESE have a positive or inverted U-shaped impact on EPEB and SPEB. Models 1 to 14 were constructed, as shown in Table 7. Based on Ref. [70], if a significant regression result is observed between independent and dependent variables but not the square of independent variables and a positive impact can be confirmed. If significant regression results can be found between independent and dependent variables and also between the square of independent variables and dependent variables, a U-shaped relationship can be demonstrated. Besides, based on Ref. [71], the non-standardized coefficient (B) is more concerned with the direct impact and original change of the independent variable on the dependent variable, while the standardized coefficient (β) is more concerned with the relative impact and comparison between different independent variables. Therefore, β used in the regression equation for explaining and comparing variables in this study.

Table 6. Descriptive Statistics and Correlation Analysis of Variables.

Variables	Mean Value	Standard Deviation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
Gender	0.71	-	1.000																					
Age	38.53	8.26	0.107	1.000																				
AQ	53.87	-	0.144	0.169 *	1.000																			
EE	0.27	-	0.060	0.183 *	0.016	1.000																		
OEES	54.62	59.78	0.048	0.074	0.039	0.085	1.000																	
EES	18.38	14.03	0.054	0.033	0.075	0.048	0.052	1.000																
EY	6.42	9.77	0.072	0.020	0.032	0.129	0.069	0.046	1.000															
JS	2.90	9.32	0.198	0.037	0.043	0.063	0.175	0.074	0.066	1.000														
EEMP	0.48	-	0.093	0.025	0.086	0.072	0.040	0.048	0.092	0.087	1.000													
LVA	2.56	8.04	0.063	0.041	0.086	0.059	0.021	0.039	0.085	0.045	0.039	1.000												
OEEI	0.16	2.26	0.104 *	0.051	0.076	0.056	0.043	0.114	0.067	0.019	0.057	0.033	1.000											
EEI	0.08	2.03	0.112 *	0.065	0.061	0.074	0.058	0.066	0.063	0.034	0.081	0.058	0.052	1.000										
EEIS	0.37	-	0.060	0.023	0.068	0.135 *	0.076	0.034	0.049	0.033	0.066	0.025	0.056	0.044	1.000									
OMSE	3.59	1.16	0.094	0.069	0.076	0.165 *	0.054	0.088	0.175 *	0.206	0.138	0.241 *	0.194	0.127	0.116	1.000								
ODSE	3.32	1.05	0.033	0.061	0.091	0.107	0.122	0.082	0.111	0.377 *	0.059	0.169	0.178 *	0.143	0.098	0.313 **	1.000							
RTSE	3.26	1.25	0.015	0.075	0.184 *	0.095	0.049	0.171 **	0.084	0.188	0.132	0.084	0.165	0.151	0.124	0.189 *	0.216 *	1.000						
HRs	3.14	1.18	0.092	0.158 *	0.019	0.078	0.123 *	0.103 *	0.107	0.095	0.059	0.072	0.173 *	0.184 *	0.107	0.295 **	0.124 *	0.117 *	1.000					
FRs	3.29	1.11	0.084	0.037	0.083	0.052	0.055 *	0.124 *	0.090	0.145 *	0.062	0.068	0.220 **	0.176	0.102	0.212 *	0.349 **	0.316 **	0.195 *	1.000				
TRs	2.88	1.04	0.081	0.045	0.166 *	0.107	0.038	0.107	0.138 *	0.172	0.050	0.202 *	0.143	0.177 *	0.168 *	0.251 *	0.237 *	0.252 *	0.288 **	0.150 *	1.000			
MRs	3.38	1.30	0.069	0.057	0.134	0.262 **	0.171	0.141 *	0.082	0.096	0.134	0.077	0.079	0.065	0.061	0.314 **	0.326 *	0.167	0.223 *	0.177 *	0.169 *	1.000		
EPEB	0.31	1.37	0.052	0.055	0.071	0.119	0.195	0.064	0.075	0.084	0.058	0.072	0.075	0.089	0.115	0.185 *	0.172 *	0.196 *	0.174 *	0.179 *	0.233 **	0.184 *	1.000	
SPEB	0.23	1.56	0.036	0.050	0.094	0.106	0.076	0.088	0.091	0.076	0.097	0.080	0.054	0.062	0.134	0.297 **	0.310 **	0.185 *	0.161 *	0.248 **	0.256 **	0.229 **	0.123 *	1.000

Note: The * sign signifies the value which is statistically significant (Sig.); ** denotes $p < 0.01$, * denotes $p < 0.05$ (same below).

In order to provide quantified insight into hypothesis testing, it is important to take into account the * sign, which refers to the statistical significance of the value. The R^2 Change displays the difference in R^2 between this model and the previous model. Sig. F Change displays the *p*-value of the statistical test for this difference [72]. This finding is statistically significant, as showcased by the Sig. F Change indicators in Table 7, which are less than 0.001. This means that the results presented in Table 7 are relevant and present real relationships between statistically significant results.

Models 1 to 14 analyzed the relationship between the independent variables (OMSE, ODSE, and RTSE) and the dependent variables (EPEB and SPEB), respectively. According to these calculations, Models 2 and 3 indicate that OMSE has a significant positive impact on EPEB ($\beta = 0.224$, $p < 0.001$), not a U-shaped impact. Models 4 and 5 show that ODSE also has a significant positive impact on EPEB ($\beta = 0.208$, $p < 0.001$). Interestingly, RTSE shows a significant regression result on EPEB ($\beta = 0.069$, $p < 0.001$) in Model 6, while the square of RTSE ($RTSE^2$) shows a significantly negative correlation with EPEB ($\beta = -0.251$, $p < 0.001$) in Model 7, indicating that RTSE has an inverted U-shaped impact on EPEB, not a single positive impact. In summary, both H1a and H1b have received partial support. Similarly, Models 9 and 10 show that OMSE has an inverted U-shaped effect on SPEB, while ODSE and RTSE have significant positive impacts on SPEB based on Models 11–14. In summary, both H2a and H2b have received partial support.

5.4. Moderating Effect of ERs

To test whether ERs have a modeling role in the above-verified direct effects, Models 1 to 6 were constructed to test the relationship, as shown in Table 8.

The sig. F change indicators in Table 8 are less than 0.001, which means that the results presented in Table 8 are relevant and present real relationships between statistically significant results. Model 1 tests the moderating effect of ERs in various dimensions on the positive effect of the positive relationship between OMSE and EPEB. Model 2 examines the moderating effect of ERs on the inverted U-shaped relationship between OMSE and SPEB. Models 3 and 4, respectively, examine the moderating effect of ERs on the positive relationship between ODSE and both EPEB and SPEB. Model 5 tests the moderating effect of ERs on the inverted U-shaped relationship between RTSE and EPEB. Model 6 tests the moderating effect of ERs on the positive relationship between RTSE and SPEB.

The results indicate that: (1) all dimensions of ERs have a moderating effect on the positive relationship between OMSE and EPEB and a moderating effect on the inverted U-shaped relationship between OMSE and SPEB; (2) all dimensions of ERs have a moderating effect on the positive relationship between the ODSE and both EPEB and SPEB; (3) all dimensions of ERs have moderating effects on the inverted U-shaped relationship between RTSE and EPEB and also have moderating effects on the positive relationship between RTSE and SPEB. In summary, it can be seen that H3a and H3b are supported. The empirical results are shown in Figure 3.

Table 7. Regression Results for Direct Effect.

Variables	EPEB								SPEB					
	M1	**M2**	**M3**	**M4**	**M5**	**M6**	**M7**	**M8**	**M9**	**M10**	**M11**	**M12**	**M13**	**M14**
Gender	0.076	0.065 *	0.072 **	0.044	0.035 **	0.119	0.080	0.142 **	0.074	0.009	0.028 *	0.111 *	0.080	0.136 **
Age	0.063	0.049	0.068	0.036	0.031	0.074	0.105	0.053	0.019	0.128	0.055	0.016	0.147	0.123
AQ	0.069	0.077	0.053	0.042	0.125	0.038	0.045	0.134	0.128	0.144	0.042	0.035	0.069	0.077
EE	0.098 *	0.061	0.175	0.068	0.062	0.011	0.057	0.098 *	0.061	0.063	0.123	0.002	0.085 *	0.054
OEES	0.052	0.083 *	0.031	0.047 *	0.055	0.039	0.048	0.090	0.045	0.089 *	0.047 *	0.049	0.092	0.086
EES	0.074	0.070	−0.062	0.159	0.137	0.046	−0.173	0.055	0.126	0.053	0.245	0.190	0.143	0.075
EY	0.009	0.043	0.005 *	0.038	0.011	−0.013	0.032	−0.074	0.068	0.077 *	0.148	0.022	−0.054	0.128 *
JS	0.038	0.054 *	0.037	0.046	0.023	0.010 *	0.064	0.087	0.021	0.048	0.051 *	0.049	0.030 *	0.015
EEMP	−0.053	0.102	0.034	−0.069	0.077	−0.246 *	−0.175 **	0.006	−0.114 *	−0.235	0.022	0.046 **	0.137	−0.094 **
LVA	−0.075	−0.066 *	0.062	−0.098 **	0.061	−0.030 **	−0.244 *	−0.069 *	−0.105 *	−0.094 **	−0.011 *	−0.150	0.235	−0.107
OEEI	0.394	−0.183 *	0.005	0.037 *	0.154	0.229	0.052	0.047	0.172	0.088	0.205	0.082	0.174 *	0.021
EEI	−0.048 *	0.024	0.033 *	−0.036	−0.025	−0.121	−0.091	−0.188	−0.214 *	0.117	0.056	−0.193 *	−0.249	0.016 *
EEIS	0.074 *	0.069	0.065	0.048 *	0.190	0.036 *	0.149	0.062 *	0.186	0.205 *	0.101 *	0.231 **	0.115 *	0.090 *
OMSE		0.224 ***	0.345 ***						0.330 **	0.225 **				
$OMSE^2$			−0.307							−0.217 ***				
ODSE				0.208 ***	0.381 ***						0.156 **	0.255 **		
$ODSE^2$					−0.235							−0.293		
RTSE						0.177 **	0.294 **						0.345 ***	0.274 **
$RTSE^2$							−0.251 ***							−0.218
R^2	0.038	0.301	0.625	0.239	0.610	0.385	0.723	0.079	0.290	0.518	0.321	0.575	0.333	0.642
F	6.940 ***	7.231 ***	8.411 ***	9.225 ***	9.363 ***	9.847 ***	10.768 ***	7.576 ***	8.732 ***	9.215 ***	9.883 ***	11.962 ***	7.837 ***	10.532 ***
R^2 Change	0.038	0.263	0.324	0.201	0.371	0.347	0.338	0.079	0.211	0.228	0.242	0.254	0.254	0.309
F Change	6.940 ***	11.062 ***	23.871 ***	17.239 ***	40.068 ***	12.270 **	65.412 ***	7.576 ***	20.409 ***	38.925 ***	24.025 ***	56.830 ***	18.199 ***	48.136 ***

Note: The * sign signifies the value which is statistically significant (Sig.); *** denotes $p < 0.001$, ** denotes $p < 0.01$, * denotes $p < 0.05$.

Table 8. Regression Analysis of Moderating Effect.

Variables	EPEB	Variables	SPEB	Variables	EPEB	SPEB	Variables	EPEB	Variables	SPEB
	M1		M2		M3	M4		M5		M6
Gender	0.165	Gender	0.110 *	Gender	0.107	0.028	Gender	0.164 *	Gender	0.080
Age	0.079	Age	0.037	Age	0.084	0.049	Age	0.205	Age	0.173
AQ	0.123	AQ	0.038	AQ	0.105	0.077	AQ	0.118	AQ	0.024
EE	0.088	EE	0.169	EE	0.115	0.061	EE	0.092	EE	0.142
OEES	0.052	OEES	0.075	OEES	0.028	0.099 *	OEES	0.047	OEES	0.038
EES	0.064	EES	0.053	EES	0.077	0.170	EES	0.156	EES	0.155
EY	0.029	EY	0.104	EY	0.096	0.043	EY	0.083	EY	0.039
JS	0.038	JS	0.053	JS	0.101	0.073 *	JS	0.077	JS	0.067
EEMP	−0.151	EEMP	−0.062	EEMP	0.123	−0.028 *	EEMP	0.130	EEMP	0.168
LVA	−0.094 *	LVA	−0.078	LVA	0.009	−0.025	LVA	−0.171	LVA	0.057
OEEI	0.048	OEEI	0.195	OEEI	0.172	0.024	OEEI	0.085	OEEI	0.196
EEI	−0.032	EEI	0.134	EEI	0.043	0.049	EEI	0.167	EEI	0.056
EEIS	0.026 *	EEIS	0.082	EEIS	0.251	0.024	EEIS	0.147	EEIS	0.117
OMSE	0.168 ***	$OMSE^2$	0.039 ***	ODSE	0.019 **	0.013 ***	$RTSE^2$	0.060 **	RTSE	0.041 **
HRs	0.224 ***	HRs	0.045 **	HRs	0.066 **	0.043 **	HRs	0.094 ***	HRs	0.068 **
OMSE × HRs	0.071 ***	$OMSE^2$ × HRs	0.115 **	ODSE × HRs	0.180 ***	0.285 ***	$RTSE^2$ × HRs	0.172 **	RTSE × HRs	0.155 ***
FRs	0.372 ***	FRs	0.047 ***	FRs	0.312 ***	0.113 ***	FRs	0.036 ***	FRs	0.094 **
OMSE × FRs	0.153 **	$OMSE^2$ × FRs	0.199 ***	ODSE × FRs	0.029 **	0.039 ***	$RTSE^2$ × FRs	0.165 **	RTSE × FRs	0.162 ***
TRs	0.236 ***	TRs	0.060 **	TRs	0.075 ***	0.210 **	TRs	0.149 ***	TRs	0.107 **
OMSE × TRs	0.046 **	$OMSE^2$ × TRs	0.122 ***	ODSE × TRs	0.173 ***	0.044 ***	$RTSE^2$ × TRs	0.082 ***	RTSE × TRs	0.030 ***
MRs	0.233 ***	MRs	0.138 **	MRs	0.060 **	0.291 ***	MRs	0.184 **	MRs	0.159 ***
OMSE × MRs	0.189 **	$OMSE^2$ × MRs	0.146 ***	ODSE × MRs	0.128 ***	0.103 **	$RTSE^2$ × MRs	0.010 ***	RTSE × MRs	0.220 ***
R^2	0.353	R^2	0.382	R^2	0.319	0.374	R^2	0.373	R^2	0.398
F	11.265 ***	F	15.227 ***	F	12.330 ***	19.698 ***	F	20.259 ***	F	17.005 ***
R^2 change	0.353	R^2 change	0.205	R^2 change	0.294	0.356	R^2 change	0.340	R^2 change	0.391
F change	30.907 ***	F change	44.158 ***	F change	27.646 ***	62.032 ***	F change	50.068 ***	F change	43.283 ***
Observations	260	Observations	179	Observations	260	179	Observations	260	Observations	179

Note: The * sign signifies the value which is statistically significant (Sig.); *** denotes $p < 0.001$, ** denotes $p < 0.01$, * denotes $p < 0.05$.

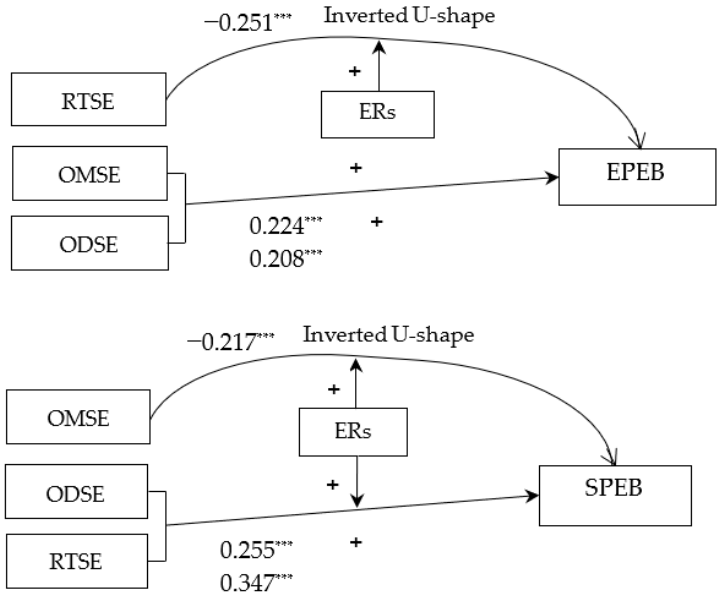

Figure 3. Schematic Diagram of Empirical Results. Note: The * sign signifies the value which is statistically significant (Sig.); *** denotes $p < 0.001$.

6. Discussions

6.1. The Dual Direct Effect of ESE

The findings in this study support and expand the relevant views of Carin et al. and Chen et al. that part-time entrepreneurship is a complex behavior, and entrepreneurial enthusiasm and self-efficacy cognition are important factors [6,40]. However, unlike the prevailing view in previous studies that lower ESE individuals are more inclined to part-time entrepreneurship [5,52], this study provides two new findings:

(1) There are two impact paths of ESE on part-time entrepreneurship, namely positive impact or inverted U-shaped curve impact. Part-time entrepreneurs have been relatively less involved in the external environment of employment work, are less able to analyze the market, and lack practical operations related to enterprise management and operation. Therefore, ESE can address the above issues by enhancing entrepreneurial intention. and part-time entrepreneurial intentions are positively reinforced when the expected economic or value benefits of a part-time entrepreneurial venture reach a certain level. Additionally, when individuals' entrepreneurial beliefs and self-confidence exceed a certain threshold, or when they expect to earn more from entrepreneurship than from employment, it will increase their willingness to resign from employment and achieve the maximum benefit of ESE. Thus, the effect of ESE on PEB can show an inverted U-shaped relationship of first promotion and then inhibition.

(2) The effect of different types of ESE on different types of PEB is heterogeneous. When individuals start part-time entrepreneurship mainly to pursue economic benefits, their beliefs in grasping business opportunities and achieving organizational goals can strengthen their confidence in enhancing the expected financial performance of the entrepreneurial enterprise. As a result, OMSE and ODSE have positive effects on EPEB. However, RTSE is more closely related to individuals' attitudes toward entrepreneurial risk. When part-time entrepreneurs have the confidence and determination to cope with entrepreneurial risks within a certain range, they tend to take on appropriate entrepreneurial risks through part-time entrepreneurship. And when an individual's beliefs about coping with entrepreneurial risk exceed a certain range and they are able to take the risk of quitting their employment to start a full-time business, they will actively engage in full-time entrepreneurial behavior. Thus, RTSE has an inverted U-shaped effect on EPEB. In contrast, if individuals start PEB mainly to change their lifestyle and achieve life value rather than simply pursue economic benefits, they are more willing to grasp business opportunities and

dare to deal with long-term risks and pressures to enhance their confidence in achieving long-term goals. As a result, ODSE and RTSE have a positive effect on EPEB. However, compared to beliefs such as seizing opportunities and responding to risks, individuals' confidence in controlling business organizations and achieving organizational goals can better enhance the expected development of the enterprise. Therefore, when the level of OMSE is within a certain range, individuals tend to achieve risk prevention and moderate returns through part-time entrepreneurship. When belief in organizational management exceeds a certain range, individuals can maximize entrepreneurial benefits through full-time entrepreneurship. Thus, OMSE has an inverted U-shaped effect on EPEB.

6.2. The Moderating Effect of ERs

This study confirmed that the ERs have a moderating effect between ESE and PEB. proposed by Raffiee and Feng [19] that ERs as entrepreneurial conditions have a significant impact on part-time entrepreneurial behavioral decision-making. This paper also expanded on the moderating effects of ERs in different dimensions. Specifically, part-time entrepreneurs have limitations in entrepreneurial energy, making it more difficult to gain sufficient trust and support from capital and sales markets in a short period of time. In addition, facing the increasingly competitive challenge of market elimination mechanisms, part-time entrepreneurs are under pressure to timely convert product value to reduce sustained investment costs. In this context, PEB requires professional and technical talents to ensure intellectual productivity, sufficient assets to ensure operational cost investment, innovative technology and products to obtain core competitiveness, and precise markets to seek product transformation. When individuals obtain support from the above-mentioned resources (human, finance, technology, and market), it can strengthen the entrepreneurial confidence and beliefs of PEB thereby enhancing the expected returns and success rate of PEB, and ultimately promoting PEB.

7. Conclusions and Implications

7.1. Conclusions

This paper empirically studied the impact mechanism and implementation paths among ESE, ERs, and PEB based on the "cognitive-environment-behavior" logic of the Triadic Reciprocal Determinism by using the questionnaire data of part-time entrepreneurs from 11 cities covering the three major regions of central, eastern, and western China. The research results indicate that: (1) ESE has two impact paths on two types of PEB. That is, OMSE and ODSE have a positive impact on EPEB, and RTSE has an inverted U-shaped impact on EPEB. (2) ODSE and RTSE have a positive impact on SPEB; OMSE has an inverted U-shaped curve impact on SPEB. This indicates that, compared to general entrepreneurial behavior, the impact of ESE on PEB has distinct heterogeneity. (3) ERs play a positive moderating role in the impact of ESE on both types of PEB. Based on the heterogeneous effects of each dimension of ESE and ERs on different types of PEB, part-time entrepreneurs should comprehensively assess their own ESE characteristics, focus on accumulating corresponding types of ERs, and find a balance point among limited abilities and resources.

7.2. Implications

7.2.1. Theoretical Implications

The main theoretical implications of this paper are as follows: (1) This study expanded the analytical perspective of PEB. It comprehensively analyzed the characteristics of PEB under the framework of "ESE-ERs-PEB" (cognition-environment-behavior), including the evaluation of entrepreneurial beliefs and abilities by part-time entrepreneurs and the role of ERs. It addressed some limitations of previous studies that focused more on subjective influencing factors than objective conditional factors, and that subjective factor studies did not focus on some key influencing factors of ESE. (2) This study categorized and analyzed PEB driven by economic profit and self-value, explored the ESE required

by different types of part-time entrepreneurs, and explored the dual impact mechanism of ESE on PEB, as well as what ER support should be sought. (3) This study not only provides theoretical guidance for part-time entrepreneurs to effectively and successfully carry out entrepreneurial activities but also provides a theoretical basis for the government to formulate part-time entrepreneurship policies.

7.2.2. Practical Implications

This study has implications for both individuals and governments on how to enhance PEB. For part-time entrepreneurs, the recommendation is that a comprehensive evaluation of ESE (such as entrepreneurial determination, confidence, risk tolerance, opportunity sensitivity, and skill perception, as well as integrated factors such as leisure needs and entrepreneurial experience) is necessary. This can help part-time entrepreneurs ensure their entrepreneurial goals, gain enough knowledge and preparation, and predict entrepreneurial costs and benefits. In addition, individuals could pay close attention to the business environment, explore high-quality opportunities, and find start-up capital. When these conditions mature, individuals are more willing to initiate part-time businesses alongside wage employment. Also, according to the findings on the dual effect of ESE on PEB, individuals could strengthen their organizational and management abilities and enhance business opportunity insight if economic profit is their main motivation for PEB, and strengthen risk prevention and response capabilities if self-value is the main motivation. In addition, part-time entrepreneurs should explore more critical ERs, considering their positive roles in the relationships between various ESE and PEB.

For governments, related departments could focus on assisting groups that plan to implement or are currently implementing part-time entrepreneurship, strengthening their comprehensive abilities, and enhancing their entrepreneurial beliefs. For example, based on their employment experience and industry type, the government could provide effective entrepreneurial skills training services to guide them into suitable entrepreneurial industries and establish part-time entrepreneurship consulting services to help evaluate the operability and profitability of part-time entrepreneurship projects. Furthermore, the government could assist the group in targeting ERs and provide conditional support for the transformation of entrepreneurial beliefs into entrepreneurial behavior. The government could also strengthen the introduction and transmission of high-level talents within the administrative region and create a good think-tank environment for part-time entrepreneurship. All these implications could lower the entry threshold for part-time entrepreneurial enterprises and provide finance and intelligence support so as to assist part-time entrepreneurial enterprises in producing high-quality products and services with good sales volume.

8. Research Limitations

Part-time entrepreneurs are widely present in various industries in China; this study chose a small portion of typical industries in some of China's major cities. Further research could enrich the industry type and enlarge the regional distribution of the sample to enhance external validity and form more general findings.

Furthermore, the male-to-female ratio of part-time entrepreneurs in the research sample is 2.09:1, which is significantly higher than the male to female ratio of the general population in China (2022) (1.05:1) and the overall male to female ratio of the entrepreneurial population in China (2022) (1.24:1) [73]. The reasons for the gap between the above data need to be further explored.

Author Contributions: Writing: J.S.; revising and editing: Y.Z. (Ying Zhao) and S.W.; project administration: Y.Z. (Yang Zhou). All authors have read and agreed to the published version of the manuscript.

Funding: Research Funding at Wuhan Polytechnic University.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available upon reasonable request from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

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