

# The Impact of Entrepreneurial Failure Learning on Recreational Willingness: A Moderated Mediation Model

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**Abstract:** This article conducts a questionnaire survey on entrepreneurs who have experienced failures, exploring how entrepreneurial failure learning affects creativity through entrepreneurial resilience and the moderating effect of social support. The final empirical results show that entrepreneurial failure learning and entrepreneurial resilience have a significant positive impact on the willingness to re create; The learning of entrepreneurial failure has a significant positive impact on entrepreneurial resilience; Entrepreneurial resilience has a mediating effect between learning from entrepreneurial failure and recreational willingness; The mediating effect of social support on entrepreneurial resilience plays a moderating role. The results of this study expand the research on the relationship between entrepreneurial failure learning, entrepreneurial resilience, and recreational willingness. It has important theoretical and practical value in motivating entrepreneurial failures to engage in failure learning to improve entrepreneurial resilience and thus enhance recreational willingness.

**Keywords:** Entrepreneurial failure learning, Entrepreneurial resilience, Recreational Willingness, Social support.

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## 1. Introduction

Entrepreneurship, as an evolutionary process of trial and error, often has a higher frequency and probability of failure than success. In fact, most entrepreneurs have experienced entrepreneurial failure before success. For entrepreneurs, failure can trigger a series of negative emotions, such as sadness, shame, frustration, anger, etc. However, some entrepreneurs will never recover and stop moving forward from then on, while others will become more and more courageous in their failures, actively overcoming the shadow of failure, reflecting and summarizing their experiences and lessons, striving to make a comeback, rapidly transforming and eventually achieving success. Therefore, facing failure directly is the key to subsequent creative behavior. Essentially, failure is not a precious asset or the mother of success, but rather a reflection and summary of the lessons learned from failure. Failure experiences require reflection and summarization, and the process of reflection and summarization is the process of entrepreneurs learning from failures. Therefore, it is of great practical significance for entrepreneurs to effectively learn how to overcome the shadow of failure and make a comeback after failure. Due to the "survivor bias", most research in the field of entrepreneurship focuses on the realization path or influencing factors of entrepreneurial success, while there is still a lack of attention to how entrepreneurs can overcome the shadow and make a comeback after encountering setbacks.

In the context of entrepreneurship, entrepreneurial teams often face risks and challenges brought about by environmental uncertainty. In order to ensure the sustainable development of the enterprise, entrepreneurial teams need to have a positive attitude to cope with difficulties and surpass themselves. The ability of individuals to effectively adapt,

actively respond, recover from failures, and gain growth in situations full of crisis and pressure is closely related to psychological resilience. Research has shown that psychological resilience can help individuals continuously adjust themselves in adverse environments and quickly overcome the shadow of failure. Entrepreneurial resilience is the ability of entrepreneurs to quickly recover from entrepreneurial difficulties and actively adapt to environmental changes. Therefore, introducing resilience into the field of entrepreneurship can deeply explain the mechanism by which entrepreneurs and their teams learn from failure and rebound, thereby promoting the enhancement of creativity. In addition, during the entrepreneurial process, entrepreneurs often face enormous challenges and uncertainties, and failure is an inevitable part. However, how entrepreneurs cope with failure, learn from it, and decide whether to try entrepreneurship again is influenced by various factors. Social support can influence the decisions and behaviors of entrepreneurs by providing psychological support, emotional encouragement, information sharing, and substantive assistance. Therefore, this article introduces the variable of social support to reveal how social support affects the reactions and decisions of entrepreneurs, providing more effective support and assistance for entrepreneurs, which has important theoretical and practical significance for promoting entrepreneurial success and creativity.

Therefore, there is a close relationship between entrepreneurial failure learning, social support, entrepreneurial resilience, and the desire for creativity. Based on this, this study is based on the theory of entrepreneurial learning, aiming to explore the mechanism by which entrepreneurial failure learning affects creativity through entrepreneurial resilience in the context of failure. At the same time, it examines the social support boundary conditions by which entrepreneurial failure learning transforms into

entrepreneurial resilience and affects creativity. Thus, it helps entrepreneurs who have experienced failures to overcome the shadow of failure in a timely manner, effectively adjust their psychological state, actively learn, reflect and summarize their experiences and lessons, thereby stimulating their desire for creativity and realizing their self-worth.

## **2. Literature Review**

### **2.1. Learning from Entrepreneurial Failure**

Entrepreneurial failure refers to the bankruptcy and closure of a company. The concept definition of this perspective focuses on objective financial events and is more focused on the perspective of enterprises, which has certain limitations but is easy to quantify failures and establish samples. What knowledge can entrepreneurs gain from entrepreneurial failure? What is the content of learning about entrepreneurial failure? Throughout existing research, it can be found that there is still controversy among scholars regarding the content of learning about entrepreneurial failure. Previous studies have suggested that the content of entrepreneurial failure learning can be divided into two parts, namely internal learning and external learning [5]. Based on the background of entrepreneurial failure, scholars have empirically analyzed through case studies that the content of failure learning should include four aspects: self-learning, business learning, network and relationship learning, and new enterprise management learning. They believe that the core of entrepreneurial failure learning is self-learning. Scholars have also categorized the learning of entrepreneurial failure into three aspects based on the three elements of entrepreneurship (opportunities, resources, and entrepreneurial teams): learning knowledge related to opportunities, learning knowledge related to resource management, and learning knowledge related to teams. Some scholars believe that the content of entrepreneurial failure learning in the Chinese context should be divided into three aspects: self-learning, internal learning, and external learning, and Chinese entrepreneurs place the greatest emphasis on internal learning. In summary, research on learning content related to entrepreneurial failure has become more diverse. Scholars have divided the content of entrepreneurial failure learning into different dimensions from different perspectives and contexts. However, there is still insufficient research on the relationship between different learning content and continuous entrepreneurial intention.

### **2.2. Entrepreneurial Resilience**

Resilience is an individual's positive psychological capital. Different levels of resilience can lead to different attitudes, behaviors, and performance. Some individuals can recover quickly from adverse events, withstand high-level destructive changes, and successfully respond, while others cannot recover quickly or even fail to recover. Previous studies often describe resilience as an organic combination of "encountering misfortune" and "successfully coping" or "adapting well", originating from an individual's psychological resilience traits, as well as extending to the state, process, and outcome of self-recovery, good adaptation, and even surpassing self-flourishing in severe adversity [9]. Therefore, adversity can be seen to some extent as a stimulus for psychological resilience, and positive adaptation and successful coping can be seen as positive outcomes of psychological resilience. Combining the field of psychology with resilience. The definition of sexuality in this study

defines resilience as a positive psychological state that enables individuals to effectively recover to or even surpass their initial state in adversity, manifested as an individual's ability to recover from failure. Therefore, entrepreneurial resilience can be used to explain why different entrepreneurs face challenges and threats in the business environment, and their degree of adaptation varies.

In the field of entrepreneurship, research has started with the performance and differences of entrepreneurial resilience, gradually transitioning to exploring the mechanism of resilience's impact on the entrepreneurial process. Scholars view resilience as a key trait, defining it as the ability to live positively after experiencing difficulties or adversity, the ability to handle adversity with ease, and even as a resource that individuals can mobilize under pressure. Previous studies have found that the resilience of entrepreneurs is mainly influenced by factors such as culture and identity. The impact of entrepreneurial resilience on entrepreneurial activities has shifted from theoretical construction to empirical research. For example, BULLOUGH et al. found through survey data in Afghanistan that individual resilience can enhance entrepreneurial intention under adverse conditions (such as war), and the resilience and self-efficacy of entrepreneurs in dangerous areas interact to jointly strengthen entrepreneurial intention, enabling them to grow and learn in adversity, and put entrepreneurial ideas into action [10]. FISHER et al. found through their study of 215 entrepreneurs that entrepreneurs are more resilient than other groups, and this resilience contributes to entrepreneurial success. Resilience promotes the self-adjustment of entrepreneurs, helps them overcome entrepreneurial obstacles, better cope with unfavorable environments around them, and take action in adversity instead of being hesitant.

## **3. Hypothesis Derivation**

### **3.1. Entrepreneurship Failure Learning and Recreational Wishes**

When people experience entrepreneurial failure, they often feel frustrated and disappointed. However, learning from failures and learning from them is an important opportunity for growth and development. By reflecting on their mistakes and shortcomings, people can recognize the problems in the entrepreneurial process and find directions for improvement. Entrepreneurship failure learning not only helps people better understand their shortcomings, but also enables them to develop more comprehensive and in-depth knowledge and skills. By analyzing the causes and consequences of failure, people can identify areas for improvement and learn and cultivate relevant skills in a targeted manner. This learning process not only helps to improve one's entrepreneurial ability, but also lays a solid foundation for trying entrepreneurship again [11]. Learning about entrepreneurial failure can also enhance personal confidence and determination. By facing setbacks and difficulties, people can cultivate a resilient mindset and positive psychological qualities. They gradually understand that failure does not mean an end, but an opportunity for learning and growth. This growth process has inspired them to try entrepreneurship again, and they are more firmly convinced of their abilities and values. Learning from entrepreneurial failures can also provide valuable experiences and lessons to help people better plan and prepare for their next entrepreneurship. By analyzing their own failure experiences, people can identify areas that need improvement

and develop more effective strategies and plans. They can avoid previous mistakes and make wiser decisions in their next entrepreneurship. Based on this, a hypothesis is proposed:

H1: Learning from entrepreneurial failure has a positive impact on the recreational willingness.

### **3.2. Entrepreneurship Failure Learning and Entrepreneurship Resilience**

Entrepreneurship failure learning is a valuable experience accumulation and growth opportunity. When entrepreneurs experience failure, they face setbacks and difficulties, and may feel disappointed and discouraged. However, by learning and drawing lessons from failures, entrepreneurs can cultivate stronger entrepreneurial resilience. Learning about entrepreneurial failure enables entrepreneurs to recognize the mistakes and shortcomings they have made during the entrepreneurial process. By reflecting and analyzing the reasons for failure, they can have a clearer understanding of their weaknesses and find directions for improvement [12]. This increase in awareness and cognition helps entrepreneurs better cope with potential future challenges. Learning from entrepreneurial failure can also cultivate a resilient mindset and positive psychological qualities. Through experiencing failure, entrepreneurs learn how to face setbacks and difficulties, and draw strength from them. They gradually understand that the path of entrepreneurship is not smooth sailing, but full of ups and downs and challenges. This mindset shift enables them to better cope with potential difficulties and setbacks in the future, maintain a positive attitude, and continue to work hard. Learning from entrepreneurial failures can also provide valuable experiences and lessons to help entrepreneurs better adapt to changes. In the process of entrepreneurship, changes in the market and environment are inevitable. By learning from failure, entrepreneurs can better understand market demands and changes, and adjust their strategies and plans in a timely manner. This adaptability enables them to adapt more flexibly to changes and increase the chances of success in entrepreneurship. Based on this, a hypothesis is proposed:

H2: Learning about entrepreneurial failure has a positive impact on entrepreneurial resilience.

### **3.3. Entrepreneurial Resilience and Desire for Further Creativity**

Entrepreneurial resilience is an essential quality for entrepreneurs in the entrepreneurial process. The entrepreneurial journey is full of various challenges and difficulties, and entrepreneurs need to have a resilient mindset to cope with these difficulties. People with entrepreneurial resilience are more likely to not easily give up in the face of setbacks, but to maintain a positive attitude and find solutions to problems. The cultivation of entrepreneurial resilience can enhance an individual's determination and willpower. When entrepreneurs face difficulties and setbacks, they need to have enough determination and perseverance to overcome difficulties and continue moving forward. Entrepreneurial resilience enables them to persist in their efforts, not be knocked down by difficulties, and continue to strive for the goal of starting a new business. Entrepreneurial resilience can also cultivate adaptability and flexibility to change [12]. During the entrepreneurial process, changes in the market and environment are the norm. People with entrepreneurial resilience are better able to adapt to these changes and adjust their strategies and plans in a timely manner. They are open

to change, able to learn from failures, make necessary adjustments to adapt to new challenges and opportunities. When entrepreneurs have a resilient mindset and the ability to adapt to change, they have more confidence and motivation to try entrepreneurship again. They believe that they can learn valuable lessons from failure and apply these experiences to achieve success. Entrepreneurial resilience gives them more determination and courage to pursue the opportunity to start again. Based on this, a hypothesis is proposed:

H3: Entrepreneurial resilience has a positive impact on creativity.

### **3.4. The Mediating Role of Entrepreneurial Resilience**

Entrepreneurship failure learning is the process in which entrepreneurs learn and grow from failure. In the process of entrepreneurship, failure is an inevitable part, and entrepreneurs can learn valuable lessons from it through failure learning. They reflect on the reasons for their failure, recognize their mistakes and shortcomings, and find directions for improvement. This learning process can help entrepreneurs improve their abilities and qualities [13]. People with entrepreneurial resilience are more likely to learn from failure and apply this learning to decision-making and action in starting a new business. They are able to maintain a positive attitude, not be discouraged by failure, but view failure as an opportunity for growth. Entrepreneurial resilience enables them to persist in their efforts, seek new entrepreneurial opportunities, and maintain confidence in success. Based on this, a hypothesis is proposed:

H4: Entrepreneurial resilience plays a mediating role between entrepreneurial failure learning and the desire for creativity, that is, entrepreneurial failure learning promotes creativity through entrepreneurial resilience.

### **3.5. The Regulatory Role of Social Support**

When entrepreneurs face failure, social support can provide psychological support and encouragement. The support of friends, family, or entrepreneurial communities can make entrepreneurs feel cared for and understood, reducing their psychological pressure. This kind of support can encourage entrepreneurs to face failure more actively, thereby better reflecting on and learning from failure [14]. Social support can also provide information and resources to help entrepreneurs better understand the reasons for failure and find directions for improvement. They can learn from the experiences of others and understand different entrepreneurial strategies and methods. The sharing and exchange of this information can help entrepreneurs better cope with failures and make wiser decisions when attempting entrepreneurship again. Meanwhile, social support can also provide substantial assistance, such as funding, technical support, or networking resources. These resources can help entrepreneurs better cope with failures, rebuild confidence, and provide necessary support for starting a new business. Based on this, a hypothesis is proposed:

H5: Social support has a moderating effect on the relationship between entrepreneurial failure learning and entrepreneurial resilience. When the level of social support is high, the positive relationship between entrepreneurial failure learning and entrepreneurial resilience is stronger.

Social support can provide psychological support and encouragement. When entrepreneurs face failure, social support can alleviate their psychological pressure and make

them feel cared for and understood. This support can enhance the positive mindset of entrepreneurs, help them better cope with failures, and learn from them. Through the presence of social support, entrepreneurs can better develop entrepreneurial resilience. They are able to learn and learn from failures, while also receiving support and encouragement from others. The development of entrepreneurial resilience in turn affects the willingness of entrepreneurs to innovate. Entrepreneurs with entrepreneurial resilience are more likely to maintain a positive attitude, persist in hard work, and maintain a strong willingness and

determination to try entrepreneurship again.

H6: Social support moderates the indirect effect of entrepreneurial resilience on the relationship between learning from entrepreneurial failure and recreational willingness. The higher the level of social support, the stronger the indirect effect of entrepreneurial failure learning on enhancing creativity through entrepreneurial resilience.

Based on the above theoretical analysis and logical deduction, a research framework is constructed as shown in Figure 1.

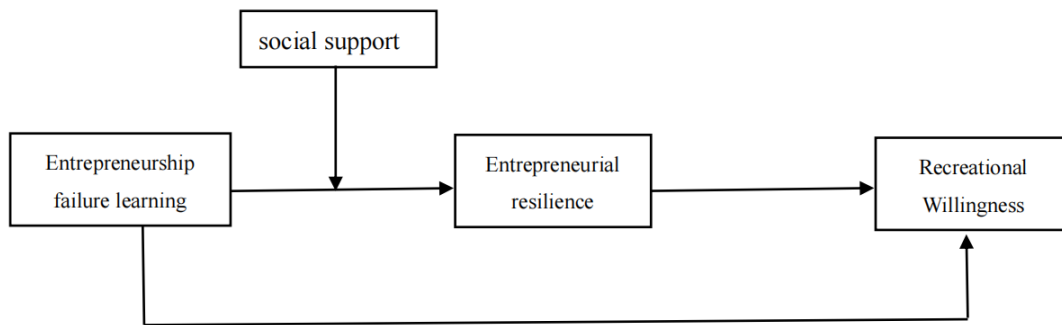


Figure 1. Research Framework

## 4. Research Design

### 4.1. Data Collection

This study collected data through a questionnaire survey, and the survey subjects were randomly selected entrepreneurs from various urban entrepreneurship incubation parks who had experienced entrepreneurial failures. Before conducting the formal survey, this study made sufficient preparations: firstly, in the initial design of the questionnaire, mature foreign scales were borrowed, and PhDs with overseas study backgrounds were invited to conduct two-way translation through "back-to-back". Then, differences were discussed together to ensure the overall consistency of the scale structure and language expression. Simultaneously seeking opinions from entrepreneurs to make the questionnaire language more accurate and easier to understand, continuously improving the questionnaire design and expression, and forming a preliminary and complete questionnaire. Secondly, a preliminary survey was conducted in the Entrepreneurship Park of Bengbu City, Anhui Province. A total of 30 initial questionnaire data were collected, and the questions were fine-tuned based on the opinions of entrepreneurs and data analysis results obtained from the preliminary survey to form the final formal questionnaire. Finally, the respondents were surveyed through two methods: on-site collection and online survey. The questionnaire was distributed mainly in Beijing, Shanghai, Anhui and other areas, and a total of 538 questionnaires were collected. We excluded questionnaires filled out by non-entrepreneurs, those whose identities were untrue, those who missed multiple answers, and those who answered reverse questions incorrectly, and ultimately obtained 296 valid questionnaires.

Among the 296 entrepreneurs, males accounted for 67.9% and females accounted for 32.1%, which is generally consistent with the overall distribution proportion of entrepreneurs; The proportion of entrepreneurs under the age of 35 is 60.7%, and the proportion of those with a bachelor's degree or above is 64.6%, indicating that most entrepreneurs

are young people with higher educational levels.

### 4.2. Variable Measurement

(1) Entrepreneurship failure learning. The design of this scale is mainly based on Wong & Cheung's research [16], and the scale Cronbach's  $\alpha$  It is 0.747.

(2) Entrepreneurial resilience. Using Zhang Xiu'e's 10 item scale adapted from Fatoki for measurement [17], the scale Cronbach's  $\alpha$  It is 0.761.

(3) Further creative wishes. Using the 5-item scale developed by Chao et al. [18], Cronbach's scale was used for measurement  $\alpha$  It is 0.722.

(4) Social support. Using the 12 item scale developed by Zimet et al. [19], Cronbach's scale was used for measurement  $\alpha$  It is 0.802.

The above variables were measured using the Likert 5-point method, where 1-5 represents a range from "strongly disagree/disagree/disagree/disagree/disagree" to "strongly agree/agree/agree/agree/agree".

(5) Control variables. Drawing on previous achievements, this study takes gender, age, education level, and marital status as control variables.

### 4.3. Common Method Deviation

For the possible issue of homologous variance, this study first ensured that the wording of the questionnaire was accurate and easy to understand, set various forms of question types (including multiple-choice, Likert scale questions, fill in the blank questions, etc.), set reverse items, and shuffle the order of items in the questionnaire design; Secondly, during the investigation process, emphasis is placed on the anonymity of the investigation and the confidentiality of the data, requiring respondents to fill in the form based on intuition and true information. It can be seen that this study aims to reduce the issue of common method bias in the questionnaire design and survey stages. After the questionnaire collection was completed, exploratory factor analysis was conducted on all variables using Harman's univariate test. A total of 21 factors were obtained without

rotation, and the contribution rate of the first factor was 20.771%, indicating that the common method bias was within an acceptable range. In addition, this study also conducted multicollinearity analysis on all variables entering the model, and the results showed that the variance inflation factor (VIF) of all variables was less than 5, which met the testing criteria, thus excluding multicollinearity issues.

#### 4.4. Reliability and Validity Testing

This study conducted reliability and validity tests on the data. From Table 1, it can be seen that Cronbach's factors include entrepreneurial failure learning, entrepreneurial resilience, willingness to re-create, and social support  $\alpha$  the coefficient values are all greater than 0.7, and the minimum combined reliability (CR) is 0.716, indicating that the questionnaire has good reliability. Exploratory factor analysis found that the factor loadings of each item were all greater than 0.5, indicating that the scale has good structural validity, and the average extracted variable (AVE) value of each variable was greater than 0.5, indicating good discriminant validity.

**Table 1.** Scale Reliability and Validity Test

Measure variables	Factor load interval	AVE	CR	Cronbach's $\alpha$
Entrepreneurship failure learning	[0.571~0.676]	0.578	0.749	0.747
Entrepreneurial resilience	[0.604~0.730]	0.648	0.763	0.761
Recreational Willingness	[0.593~0.643]	0.598	0.716	0.722
social support	[0.592~0.708]	0.610	0.807	0.802

## 5. Empirical Analysis and Results

### 5.1. Descriptive Statistical Analysis and Correlation Analysis

The mean, standard deviation, and correlation coefficient matrix of each major variable are shown in Table 2. From the results, it can be seen that there is a significant correlation between entrepreneurial failure learning, entrepreneurial resilience, willingness to re-create, and social support, which provides a preliminary basis for subsequent hypothesis testing to a certain extent.

**Table 2.** Correlation analysis and descriptive statistics

	mean value	standard deviation	one	two	three	four
Entrepreneurship failure learning	3.004	0.684	1.000			
Entrepreneurial resilience	3.632	0.582	0.364**	1.000		
Recreational Willingness	3.848	0.480	0.194**	0.596**	1.000	
social support	4.053	0.548	0.226**	0.690**	0.656**	1.000

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , the value in brackets is the t value

### 5.2. Hypothesis Testing

For the testing of the main effect. This study was based on the hierarchical regression method, and after controlling for factors such as gender, age, education level, and marital status, multiple regression analysis was conducted on the research variables (see Table 3). Using creativity as the outcome variable, the independent variable is included in the regression model on the basis of controlling for the variable. In Table 3, according to Model 2, it can be seen that entrepreneurial failure learning has a significant positive promoting effect on the recreational willingness ( $\beta = 0.268$ ,  $p < 0.001$ ). Therefore, hypothesis 1 is supported.

Testing the mediating effect. Firstly, using the mediating variable as the outcome variable, and on the basis of controlling for the variables, the independent variable is included in the regression model. In Table 3, it can be seen from Model 6 that entrepreneurial failure learning has a significant positive effect on entrepreneurial resilience ( $\beta = 0.379$ ,  $p < 0.001$ ). Therefore, hypothesis 2 is supported. Next, the creative intention will be used as the outcome variable, and on the basis of controlling for the variables, the independent and mediating variables will be included in the regression model. In Table 3, according to Model 4, it can be seen that entrepreneurial resilience has a positive impact on creativity willingness ( $\beta = 0.272$ ,  $p < 0.001$ ); Entrepreneurial failure has a positive impact on learning and creativity ( $\beta = 0.165$ ,  $p < 0.01$ ). Therefore, hypothesis 3 is supported. Combining with Model 2, it was also found that after adding the mediating variable, the regression coefficient of

entrepreneurial failure learning on creativity willingness remained positive, but the absolute value decreased from 0.268 to 0.165. This indicates that entrepreneurial resilience plays a partial mediating role. At the same time, this study also used the Bootstrap method to test the mediating effect. The results of 5000 repeated sampling showed that the estimated value of the indirect effect was 0.103, the standard error was 0.034, and the 95% confidence interval was [0.047, 0.178], excluding 0. Therefore, hypothesis 4 is supported.

In order to test the moderating effect of social support, on the basis of controlling variables, both the independent variable and moderating variable were included in the regression model (i.e. Model 7 in Table 3), and then the independent variable, moderating variable, and their interaction term were also included in the regression model (i.e. Model 8 in Table 3). According to Model 8, the coefficient of the interaction term is significant ( $\beta = 0.235$ ,  $p < 0.01$ ); Meanwhile, compared to Model 7, the Adj-R<sup>2</sup> value of Model 8 has increased. To present the regulatory relationship more intuitively, this study also plotted a simple slope analysis graph, which shows the relationship between entrepreneurial failure learning and entrepreneurial resilience under high (M+1SD) and low (M-1SD) social support, respectively (see Figure 2). As shown in Figure 2, with the increase of social support, the positive relationship between entrepreneurial failure learning and entrepreneurial resilience is strengthened. Therefore, hypothesis 5 is supported.

To further examine the moderated mediating effect, this study used the method proposed by Hayes et al. and the PROCESS program to examine whether the mediating effect

of entrepreneurial resilience was moderated by social support. The results are shown in Table 4. From Table 4, it can be seen that social support positively moderates the indirect effect of entrepreneurial resilience on the relationship between entrepreneurial failure, learning, and recreational willingness. Specifically, in situations with high and low levels of social

support, the 95% confidence intervals for indirect effects are [0.073, 0.240], [0.011, 0.132], both of which do not include 0, and the difference in indirect effects between the two is significant, with 95% confidence intervals being [0.031, 0.159], which do not include 0. Therefore, hypothesis 6 is supported.

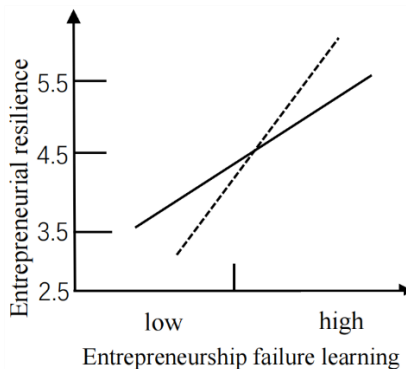
**Table 3.** Hierarchical Regression Analysis Results (N=296)

variable	Recreational Willingness				Entrepreneurial resilience			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Gender	0.085	0.063	0.078	0.066	0.02	-0.011	-0.012	0.001
Age	-0.077	-0.046	-0.073	-0.055	-0.011	0.033	0.034	0.042
educational level	-0.076*	-0.057	-0.056	-0.049	-0.057	-0.03	-0.03	-0.033
marital status	0.024	0.02	0.003	0.005	0.063	0.056	0.057	0.075*
Entrepreneurship failure learning		0.268***		0.165**		0.379***	0.388***	-0.398
Entrepreneurial resilience			0.349***	0.272***				
social support							0.03	-0.743**
Entrepreneurship failure learning × social support								0.235**
Adj-R <sup>2</sup>	0.012	0.088	0.118	0.140	0.006	0.180	0.178	0.209
Δ Adj-R <sup>2</sup>	0.012	0.076	0.106	0.052	0.006	0.174	0.172	0.203
F	1.876	6.687***	8.887***	8.985***	1.468	13.921***	11.666***	12.147***

Note: +p<0.1, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, the value in brackets is the t value

**Table 4.** Bootstrap test results for moderated mediating effects (N=2965000 samples)

Adjusting variables	Effect value	Standard error	95% confidence interval	
			lower limit	upper limit
High social support	0.147	0.043	0.073	0.240
Low social support	0.062	0.031	0.011	0.132
Differentiation	0.085	0.033	0.031	0.159



**Figure 2.** The moderating effect of social support

## 6. Conclusion and Discussion

### 6.1. Research Conclusion

Entrepreneurship is a long and uncertain process that requires entrepreneurs to continuously accumulate experience and lessons from failure, enhance resilience, and achieve success. This article is based on the theory of entrepreneurial learning and reveals the internal mechanisms of the relationship between entrepreneurial failure learning, entrepreneurial resilience, re creativity willingness, and social support from the unique context of failed re entrepreneurship. The following conclusions are drawn: (1) The more entrepreneurs learn and learn from failures, the more it helps to promote their re creativity willingness. (2) Entrepreneurial resilience mediates the positive relationship between

entrepreneurial failure, learning, and recreational willingness. (3) Social support positively moderates the relationship between entrepreneurial failure learning and entrepreneurial resilience, as well as the mediating pathway through which entrepreneurial failure learning indirectly affects creativity through entrepreneurial resilience.

### 6.2. Research Contributions

(1) This study focuses on the connotation of entrepreneurial failure learning, which to some extent supplements and enriches empirical research on entrepreneurial failure learning. This study defines the connotation of entrepreneurial failure learning from an individual perspective, and collects research data through questionnaire surveys. Through data analysis and processing, the impact mechanism of entrepreneurial failure learning on re creativity willingness is analyzed, revealing the "black box" of the mechanism between entrepreneurial failure learning and re creativity willingness.

(2) From the perspective of entrepreneurial resilience, a new explanation is provided for the relationship between entrepreneurial failure learning and creativity in the context of team entrepreneurial failure. The existing research on the relationship between entrepreneurial failure learning and re creativity willingness is mostly based on cognitive and experiential learning perspectives, and the research conclusions are inconsistent. This study explores the mechanism of entrepreneurial team's willingness to innovate after experiencing entrepreneurial failure learning from the perspective of entrepreneurial resilience.

### 6.3. Management Inspiration

(1) Inspire entrepreneurs to value failure learning and better cope with setbacks and difficulties. Entrepreneurs should realize that failure is a part of the entrepreneurial process, and learning and learning from it is the key to achieving successful re entrepreneurship. Entrepreneurs should be encouraged and supported to reflect and learn from failures, and corresponding training and resources should be provided

to help them better cope with setbacks and difficulties.

(2) Entrepreneurial resilience is a positive psychological trait of individuals and a state of collective response to challenges within a team, which requires nurture. Faced with numerous challenging and risky events, entrepreneurs and their teams should actively cultivate and enhance entrepreneurial resilience, in order to learn from experiences and lessons based on failure.

(3) Provide guidance for the government and education departments to formulate relevant entrepreneurship policies. On the basis of encouraging and supporting entrepreneurship and assisting the innovative development of new startups, the country should also formulate a logical set of entrepreneurial policies, effectively providing social support for entrepreneurs and their teams, and solving practical problems encountered in the entrepreneurial process.

#### 6.4. Research Limitations and Prospects

(1) Self-reported measurements were conducted on both independent and mediating variables at the same time point. Although this study has demonstrated through statistical analysis that the problem of common method bias is not severe, in order to avoid the impact of common method bias on the results to a greater extent, future research can further measure the independent and mediating variables separately at two time points.

(2) Only the moderating effect of social support was focused on the relationship between learning from entrepreneurial failure and recreational willingness. Given that entrepreneurs are easily influenced by situational factors during the entrepreneurial stage, future research can consider the influence of other situational factors to explore the effects of different contexts.

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