

# Study on the Current Situation and Influencing Factors of "Overwork" of Entrepreneurs in China

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**Abstract:** With the implementation of China's innovation and entrepreneurship strategy, alongside the Healthy China initiative, there has been a remarkable surge in the number of entrepreneurs. This increase, coupled with the intense competitive landscape, compels entrepreneurial organizations to rapidly and accurately establish their core competencies. As a result, instances of entrepreneurs and their team members working excessively and beyond their limits have escalated, leading to significant concerns regarding overwork. To thoroughly understand the current state of "overwork" among Chinese entrepreneurs and to investigate its influencing factors, this study analyzes data from a nationwide survey involving 1,078 entrepreneurs. It outlines the fundamental characteristics of overwork experienced by these individuals and explores the factors that either exacerbate or mitigate this issue from both proactive and reactive perspectives. Based on these findings, the paper offers management strategies aimed at enhancing the work health of entrepreneurs at the individual, organizational, and national levels.

**Keywords:** Entrepreneurs; Overwork; Proactive Factors; Reactive Factors

## 1. Introduction of the Problem

In the current context of China's dual strategies of "mass entrepreneurship and innovation" and "Healthy China", there is a notable increase in the number of entrepreneurs. However, the intensifying market competition necessitates that entrepreneurs assume multiple roles and manage a variety of tasks simultaneously to achieve success. As their perception of time becomes increasingly multifaceted, the emphasis on punctuality, schedules, and deadlines diminishes, while their preference for rapid work intensifies [1]. Concurrently,

entrepreneurs face high risks, uncertainties, and substantial workloads in their ventures, bearing significant responsibilities and enduring considerable pressure [2]. These factors may lead to prolonged periods of excessive and overloaded work, resulting in chronic fatigue that cannot be alleviated through normal rest, ultimately compromising their physical and mental well-being and giving rise to the adverse consequences of burnout, commonly referred to as "overwork". The issue of overwork among entrepreneurs has garnered considerable attention. This study aims to investigate the true state of "overwork" among Chinese entrepreneurs, interpreting the mechanisms and influencing factors of overwork from both intrinsic subjective and external objective perspectives, and to provide recommendations for the management of entrepreneurs' work health.

## 2. Literature Review

Research on the issue of "overwork" among workers has gradually unfolded from multiple disciplines, perspectives, and populations, yielding significant findings in areas such as conceptual consensus, influencing factors, formation mechanisms, and harmful consequences. However, studies specifically focusing on the issue of overwork among entrepreneurs remain largely absent. Given that "overwork" is an integrated concept encompassing both process and outcome, emphasizing the excessive time and workload that exceed normal boundaries and lead to chronic fatigue and compromised well-being, a review of the literature on entrepreneurs' work characteristics, physical and mental health, and influencing factors can initiate an exploration of overwork among entrepreneurs. Regarding work time characteristics, empirical studies have found that entrepreneurs work longer hours and bear greater responsibilities, yet they enjoy a higher degree of autonomy in

managing their work compared to employees, with significantly longer weekly working hours [3]. In terms of work pressure characteristics, research indicates that the time pressure felt by entrepreneurs can motivate them to exert greater effort, while situational pressure may reduce their efforts [4]. The stress experienced by entrepreneurs not only induces negative emotions but can also elicit positive emotions; furthermore, there exists a partial mediating effect of both positive and negative emotions in the relationship between perceived stress and entrepreneurial effort. Concerning work-family dynamics, many entrepreneurs initially aspire to balance family and career; however, as entrepreneurial activities progress, their work-family balance appears more susceptible to disruption compared to that of employees, potentially leading to conflict [5].

Much of the literature on entrepreneurs' work health and influencing factors involves comparative studies with employees. American scholars have utilized data from the NHANES (National Health and Nutrition Examination Survey) to conduct a comparative analysis of entrepreneurs and employees, incorporating self-reported measures and physiological assessments of stress and health. The findings indicate that, after controlling for past income and prior health, entrepreneurs experience greater stress than employees. While this stress positively affects their income, it has negative implications for their physical health [6]. Other studies have organized the relationships among various factors affecting entrepreneurs' health into an "environment—response—health" analytical framework, revealing that individual, organizational, familial, and social network contextual factors influence entrepreneurs' health through mediators such as stress, emotions, and lifestyle [7]. Additionally, a curvilinear (inverted U-shaped) relationship exists between the scale of entrepreneurial enterprises and both physical and mental health of entrepreneurs [8].

From these research findings, it can be inferred that factors such as entrepreneurs' personality traits, work conditions, family support, organizational context, environmental stress, and social influences can exacerbate or alleviate overwork from both proactive and reactive perspectives. This study primarily

aims to conduct an authentic assessment of the current state of overwork among entrepreneurs, exploring its formation mechanisms and influencing factors.

### **3. Research Design**

#### **3.1 Questionnaire Design and Description**

The Entrepreneurs' Labor and Work Health Survey Questionnaire is primarily divided into three sections. The first section addresses individual, organizational, and environmental characteristics, comprising 24 items that utilize a seven-point Likert scale for responses. The second section measures entrepreneurs' overwork using the Fatigue Accumulation Self-Assessment Scale developed by the Central Labor Disaster Prevention Association of Japan (2003). This scale is a straightforward self-assessment tool based on medical research findings and is currently the most widely used measure in the field of "overwork" research in China [9]. The third section gathers basic information, including gender, age, industry, years of entrepreneurship, entrepreneurial stage, business scale, and profitability, consisting of seven closed-ended questions.

#### **3.2 Survey Subjects and Implementation**

This study employs a stratified random sampling method, referencing the distribution of new enterprises in China as indicated by the 2019 Regional Innovation and Entrepreneurship Index, with proportions set at 60% for the eastern region, 20% for the central region, 15% for the western region, and 5% for the northeastern region. The research targets entrepreneurs who have initiated entrepreneurial activities, integrated resources for management, and continue to bear decision-making risks. From September to November 2019, professional researchers from the project team collaborated with local entrepreneurial management agencies to determine the scope of sample distribution and the format of the questionnaire, ensuring the quality of responses and collecting survey data. The survey was conducted through a combination of computer clients, mobile applications, and on-site paper questionnaires to sample the personal circumstances, overwork status, and influencing variables of Chinese entrepreneurs.

### 3.3 Research Methods

The “overwork intensity” serves as the dependent variable and is treated as an ordinal variable. Based on the measured scale scores, a score of 0-1 indicates “not overworked” and is assigned a value of 1; a score of 2-3 indicates “mild overwork” and is assigned a value of 2; a score of 4-5 indicates “moderate overwork” and is assigned a value of 3; and a score of 6-7 indicates “severe overwork” and is assigned a value of 4. The independent variables are derived from a literature review and encompass factors influencing entrepreneurs’ work hours, workload, and health. Proactive factors include 12 variables such as achievement motivation, self-efficacy, perfectionism, optimistic bias, physical health literacy, mental health literacy, regular exercise behavior, work values, work enthusiasm, risk preference, time preference, and time management skills. Passive factors comprise 12 variables including resource conditions, competitive stress, environmental stress, risk stress, economic stress, sunk costs, work boundary permeability, family support, competitive culture, social identity, overtime culture, and work time characteristics. The study employs ordered logistic regression (ologit) to analyze the influencing factors and effects of varying degrees of overwork among entrepreneurs. It is important to note that while individual characteristics, living conditions, entrepreneurial status, industry, and regional characteristics may introduce variations in the overwork intensity among entrepreneurs, these aspects are not the

primary focus of this study and will be treated as control variables without detailed analysis.

## 4. Empirical Results and Analysis

### 4.1 Basic Sample Characteristics

The survey encompassed 22 provinces, 3 municipalities, and 4 autonomous regions across the country, distributing a total of 1,200 questionnaires to entrepreneurs who had established their businesses within the past eight years. Ultimately, 1,078 questionnaires were retrieved, yielding a response rate of 89.91%. Among the respondents, 69.01% were male and 30.99% were female. The age distribution was predominantly between 25 and 35 years, accounting for 65.56% of the sample; those aged 24 and below comprised 11.2%; individuals aged 36 to 45 represented 17.81%; and those over 46 years constituted 2.41%. Additionally, 72.60% of the respondents were married, while 28.48% were unmarried.

### 4.2 Distribution of Overwork Intensity among Chinese Entrepreneurs

The mean score for overwork among Chinese entrepreneurs was 3.67, indicating an overall assessment that surpasses “mild overwork” and approaches the threshold for “moderate overwork”. The standard deviation was 2.22, reflecting considerable internal variability in the levels of overwork among respondents, with 56.4% of entrepreneurs classified as experiencing moderate to severe overwork. The specific distribution is detailed in Table 1 below:

**Table 1. Distribution of Overwork Intensity among Chinese Entrepreneurs**

Overwork Level	Fatigue Accumulation Score	Frequency	Valid Percentage (%)	Cumulative Percentage (%)
Not Overworked	0 points	134	12.4	20.8
	1 point	90	8.3	
Mild Overwork	2 points	93	8.6	22.8
	3 points	153	14.2	
Moderate Overwork	4 points	193	17.9	28.2
	5 points	111	10.3	
Severe Overwork	6 points	194	18.0	28.2
	7 points	110	10.2	

### 4.3 Regression Equation Construction for Influencing Factors of Overwork among Chinese Entrepreneurs

#### 4.3.1 Analysis of Full Variable Multiple Response Regression Equation

The results of the multiple response regression analysis indicate that the effective sample size is 1,079, with  $R^2=0.0792$ ,  $LR \chi^2(23) = 257.57$ , and  $P=0.000<0.001$ , demonstrating that the regression equation with “overwork intensity among entrepreneurs” as the

dependent variable is statistically significant. Among the 24 independent variables, 12 were identified as significant. Specifically, six factors—perfectionism, optimistic bias, regular exercise behavior, work enthusiasm, resource conditions, and family support—are associated with alleviating overwork. Conversely, six factors—physical health literacy, environmental stress, risk stress, work boundary permeability, work time characteristics, and overtime culture—are linked to exacerbating overwork.

4.3.2 Optimization of the Regression Equation  
To achieve a better fit, the 12 insignificant variables were excluded before re-running the regression, resulting in the final multiple response regression equation. The statistics yielded LR  $\chi^2(13) = 244.73$ ,  $Prob > \chi^2 = 0.0000$ , and Pseudo  $R^2 = 0.0752$ . The mean Variance Inflation Factor (VIF) was 1.25 (less than 5), indicating minimal multicollinearity among the variables and a good model fit. The specific results are presented in Table 2.

**Table 2. Adjusted Multiple Response Regression Analysis Results and Multicollinearity Test**

Variable Category	Primary Variable	Secondary Variable	Regression Coefficient	P-value	VIF
Proactive Factors	Personality Traits	Perfectionism	-0.22***	0.000 ***	1.38
	Entrepreneurial Cognition	Optimistic Bias	-0.12***	0.001***	1.35
		Physical Health Literacy	0.16***	0.000***	1.34
		Regular Exercise Behavior	-0.12***	0.000***	1.13
	Work Values	Work Enthusiasm	-0.12**	0.028**	1.33
Passive Factors	Social Level	Resource Conditions	-0.11**	0.015**	1.28
		Environmental Stress	0.13***	0.007***	1.28
		Risk Stress	0.19***	0.000***	1.23
	Family Level	Work Boundary Permeability	0.10**	0.012**	1.22
		Family Support	-0.12***	0.001***	1.22
	Organizational Level	Work Time Characteristics	0.24***	0.000***	1.20
	Overtime Culture	0.15***	0.000***	1.17	

Note: \*P<0.1, \*\*P<0.05, \*\*\* P<0.01

**4.4 Effects of Significant Influencing Factors on Entrepreneurs’ Overwork**

The preceding analysis elucidates the impact of each significant independent variable on the overwork intensity among entrepreneurs. Given that the regression coefficients from the ologit model do not directly reflect the direction of influence of the independent variables on the dependent variable, nor can they be interpreted directly, it is essential to calculate the marginal effects using the mfx command in Stata. This calculation provides the elasticity coefficients, which, when averaged in absolute value, reflect the true magnitude of each independent variable’s contribution to the dependent variable. The specific results are presented in Table 3.

The passive factors significantly contributing to the exacerbation of overwork among entrepreneurs include environmental stress

and risk stress at the social level, work boundary permeability at the family level, as well as work time characteristics and overtime culture at the organizational level, collectively accounting for 40.01% of the overall impact. Among proactive factors, only the entrepreneurs’ insufficient awareness of physical health literacy emerged as a contributor to increased overwork. Conversely, proactive factors primarily contribute to mitigating the risks of excessive labor, including perfectionism in personality traits, optimistic bias in cognition, regular exercise behavior, and work enthusiasm in work values, which together represent 35.74% of the overall effect. Additionally, the relatively favorable resource conditions provided by society and the family support received by entrepreneurs effectively alleviate their overwork intensity, contributing 14.04% to the overall effect.

**Table 3. Specific Effects of Significant Influencing Factors**

Impact Effect	Variable Category	Primary Variable	Secondary Variable	Elasticity Coefficient	Regression Coefficient	Contribution Size (%)
Factors	Proactive Factors	Personality Traits	Perfectionism	0.032	-0.22***	13.62

Alleviating Overwork Degree	(35.74%)	Entrepreneurial Cognition	Regular Exercise Behavior	0.017	-0.12***	7.66
			Optimistic Bias	0.018	-0.12***	7.23
		Work Values	Work Enthusiasm	0.024	-0.12**	7.23
	Passive Factors (14.04%)	Social Level	Resource Conditions	0.017	-0.11**	6.38
		Family Level	Family Support	0.015	-0.12***	7.66
Factors Exacerbating Overwork Degree	Proactive Factors (10.21%)	Entrepreneurial Cognition	Physical Health Literacy	0.020	0.16***	10.21
	Passive Factors (40.01%)	Social Level	Environmental Stress	0.028	0.13***	8.51
			Risk Stress	0.014	0.19***	11.91
		Social Level	Work Boundary Permeability	0.018	0.10**	5.96
		Organizational Level	Work Time Characteristics	0.011	0.24***	4.68
		Overtime Culture	0.021	0.15***	8.94	

#### 4.4.1 Analysis of Factors Exacerbating Entrepreneurs' Overwork

For every unit decrease in entrepreneurs' awareness of physical health, the overwork intensity increases by 0.16 units. This is attributed to the tendency of entrepreneurs to prioritize financial gain over health; in their pursuit of profit opportunities, they significantly undervalue the importance of health resources, thereby placing themselves at greater risk of overwork. Each unit increase in perceived environmental stress corresponds to a 0.13 unit rise in the overwork intensity. In a fiercely competitive environment, entrepreneurs continuously raise their benchmarks for labor investment in order to surpass their rivals, leading to heightened time, energy, and stress demands, which culminate in the risk of excessive labor. The greater the pressure entrepreneurs face from shouldering the operational risks of their businesses, the higher the overwork intensity. According to the regression results, for each unit increase in risk stress, the overwork intensity rises by 0.19 units. Additionally, the longer entrepreneurs invest extra hours beyond normal working hours and outside their workplaces, the more severe their overwork becomes; for each unit increase in work boundary permeability, the overwork intensity increases by 0.10 units. Moreover, each unit increase in the characteristics of work time correlates with a 0.24-unit increase in perceived overwork. This is because entrepreneurs often center their decision-making around customer orientation, rapidly responding to market changes. In their efforts to balance multiple interests, they frequently undertake various tasks and strive to set a good example for their employees, all in pursuit of work efficiency. Such work demands and habits easily lay the groundwork

for overwork. Furthermore, for each unit increase in overtime culture, the overwork intensity increases by 0.15 units. Research indicates that there is no significant difference in the overwork intensity between voluntary and involuntary overtime [10]; even when entrepreneurs can autonomously decide their working hours, their enjoyment of work does not significantly reduce their social identity.

#### 4.4.2 Analysis of Factors Alleviating Entrepreneurs' Overwork

There exists a negative correlation between entrepreneurs' perfectionist personality and their overwork intensity. For each unit increase in perfectionism scores, the evaluation of overwork decreases by 0.22 units. This is because the high achievement needs associated with perfectionism stimulate entrepreneurs' passion, attachment, and desire for their work, thereby enhancing employee morale, satisfying fundamental psychological needs, and improving job satisfaction, all of which contribute to alleviating work-related stress and, consequently, overwork. An increase of one unit in optimistic bias results in a reduction of 0.12 units in overwork, indicating that a subjective sense of optimism helps mitigate both the probability and severity of overwork. Additionally, for every unit increase in work enthusiasm, overwork decreases by 0.12 units. Entrepreneurs are motivated not only by the pursuit of economic gain but also by the desire for social respect and self-fulfillment, which leads to psychological rewards that enhance overall utility. Thus, this psychological benefit can alleviate the mental burden on entrepreneurs, thereby reducing the risk of overwork. The resources available to entrepreneurs are inversely proportional to their overwork intensity; for each unit increase in resource conditions, the overwork intensity decreases

by 0.11 units. This finding corroborates the current context of China's innovation and entrepreneurship strategy, where various levels of government provide favorable conditions and resource support to entrepreneurs. Moreover, the greater the support entrepreneurs receive from their families, the lower their overwork intensity. For each unit increase in family support, the overwork intensity decreases by 0.12 units. Entrepreneurs who can rely on family support not only experience a reduction in work burdens but also benefit from decreased psychological stress, thereby lowering the likelihood of overwork. Regular exercise behavior among entrepreneurs effectively reduces their overwork intensity, as those who engage in physical activity demonstrate better health literacy and a greater emphasis on work-life balance. Furthermore, exercise serves as an effective means of alleviating work-related fatigue and stress.

## 5. Discussion and Recommendations

In the current context of China's dual initiatives of "mass entrepreneurship and innovation" alongside "Healthy China", it is imperative to focus on the labor health of entrepreneurs. The survey reveals that the overall overwork intensity among Chinese entrepreneurs is transitioning from "mild overwork" to "moderate overwork". Therefore, it is essential to analyze the influencing factors and implement targeted improvements to avert the adverse trend of escalating overwork. Furthermore, empirical analysis indicates that the factors exacerbating entrepreneurs' overwork primarily stem from passive influences such as pressures at the social, organizational, and familial levels. In contrast, the factors alleviating overwork are predominantly represented by proactive elements, including personality traits, cognitive factors, and work values. Consequently, this study proposes the following targeted recommendations at the individual, organizational, and national levels to mitigate the issue of excessive labor among entrepreneurs.

### 5.1 Individual Level

Entrepreneurs must enhance their awareness of personal health, particularly in relation to labor health, to avoid falling into the trap of

"overwork" due to their own personality traits, cognitive biases, and work values. Although this study identifies factors such as perfectionism, optimistic bias, and work enthusiasm as potential mitigators of overwork, the risk of overwork may escalate if these internal factors become negative or uncontrollable due to external influences. Entrepreneurs should actively monitor their work status and quality of life, consciously striving to minimize the encroachment of work on family and personal life. The dual pressure effect of professional life on personal life is a key factor contributing to excessive work [11]. Characteristics of work time and work boundary permeability can exacerbate entrepreneurs' overwork. Therefore, when faced with time constraints, multitasking, and fast-paced schedules, entrepreneurs should implement deliberate time management and psychological strategies to prevent physical and mental harm from the high-intensity demands of entrepreneurship. They should actively promote the mutual enhancement of work and life, improve their quality of life, and increase the value of family time, thereby garnering more family support. Empirical evidence shows that family support plays a significantly positive role in alleviating overwork. Additionally, entrepreneurs should strive to enhance their physical fitness; regular exercise can aid in the swift recovery from work-related fatigue and stress, addressing both the burdens of work and the awareness of fatigue.

### 5.2 Organizational Level

Entrepreneurs should prioritize efficiency and objectives in organizational work arrangements, rather than merely focusing on time and performance. The work values and management philosophies of entrepreneurs shape the corporate culture and control style of their organizations, subsequently influencing the assessment, evaluation, and supervision of labor health, management efficiency, and corporate performance across the entire organization. Based on the empirical findings of this study, the characteristics of entrepreneurs' working hours negatively impact their overwork intensity. Therefore, entrepreneurs must possess a profound understanding of the antecedents and consequences of excessive labor to make

scientifically sound leadership decisions regarding internal organizational management. Any inclination to deliberately induce negative emotions in entrepreneurs for the sake of gain can diminish their overall well-being under any circumstances [12]. Moreover, in the context of the new economy, market competition often appears to reward only the victor while leaving others as failures. As newcomers in the market, entrepreneurs find themselves ensnared in this system, often compelled to invest excessive time and energy—such as taking on personal responsibilities and personally leading team members to work overtime. However, this culture of overwork exacerbates the overwork intensity. Consequently, entrepreneurs should strive to avoid being drawn into the “winner-takes-all” mentality and work to reduce prolonged periods of excessive overtime.

### 5.3 National Level

On one hand, governments at all levels and their affiliated entrepreneurial service management agencies should steadfastly support and implement the health strategy outlined in the “Healthy China 2030” initiative, thereby enhancing the overall health literacy of the populace. This study has also confirmed that entrepreneurs with lower health literacy experience a significantly heightened overwork intensity. Therefore, as guided by the initiative, fostering a national atmosphere that values health, pursues well-being, and promotes wellness will be conducive to empowering entrepreneurs to strengthen their personal health responsibilities, enhance their health literacy, and cultivate a self-disciplined, health-oriented lifestyle that aligns with their individual characteristics. This, in turn, will effectively mitigate the risk factors affecting health and reduce the likelihood of overwork. On the other hand, there is a need to gradually construct and deepen the overarching framework for innovation and entrepreneurship, while intensifying guidance and support for these endeavors. The overall level and developmental status of innovation and entrepreneurship within economic regions significantly influence the broader economic and policy environment. The more robust the support available to entrepreneurs, the less

uncertainty they will perceive, making them less susceptible to overwork. Therefore, the government should increase investment in regional innovation, focus on the outcomes of such initiatives, and enhance the guidance and support for innovation and entrepreneurship, thereby boosting the vibrancy of regional entrepreneurial activities.

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