



## Rags to riches? Entrepreneurs' social classes, resourceful time allocation, and venture performance

Jianhua Ge<sup>a,\*</sup>, Joanna Mingxuan Li<sup>b</sup>, Eric Yanfei Zhao<sup>b</sup>, Fan Yang<sup>a</sup>

<sup>a</sup> School of Business, Renmin University of China, China

<sup>b</sup> Kelley School of Business, Indiana University, United States of America

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### ABSTRACT

Social classes shape entrepreneurial pursuits in that entrepreneurs from lower social class groups face more resource deficiencies compared to those from higher social class groups. In this study, we theorize that being resourceful with a particular resource—*time*—helps ventures run by lower-class entrepreneurs achieve better performance. However, we further argue that the extent to which entrepreneurs use time resourcefully is affected by the cognitive schemas stamped on them by their social class backgrounds. Our empirical analysis of 8663 Chinese private entrepreneurs between 2006 and 2010 lends robust support to these arguments. By revealing both material and cognitive constraints stemming from entrepreneurs' social classes, our study contributes to research on social classes and entrepreneurial resourcefulness and has important implications for understanding the persistence of inequality in entrepreneurship.

### Executive summary

Although entrepreneurship has been increasingly recognized as a promising pathway out of entrenched inequality, the playing field is far from level among individuals of different socioeconomic backgrounds (Anderson and Miller, 2003; Baker et al., 2005). Research on how social classes shape entrepreneurial pursuits has gained considerable attention, but past studies tend to predominantly focus on resource endowments as the underlying mechanism. In this view, entrepreneurs from lower social classes with fewer resources would presumably be disadvantaged compared to people of higher classes with greater access to resources (Davidsson and Honig, 2003; Honig, 1998). Despite the valuable insights generated from this line of research, focusing on entrepreneurs' resource endowments as the only mechanism may have resulted in partial understanding, because social classes not only directly shape their differential access to resources and opportunities, but also profoundly and persistently influence how they think and act (Côté, 2011; Kraus et al., 2011).

In this paper, we extend this line of research by accounting for the psychological and behavioral consequences of individuals' social classes and elaborating on the *dual* mechanisms underlying the effect of social class on entrepreneurs—resource endowments and cognitive schemas. In developing our theory, we focus on individuals' occupation-based social classes and theorize their influence on a particular behavior—entrepreneurs' resourceful use of time. Building on the entrepreneurial resourcefulness literature (Williams et al., 2021), we argue that being resourceful with time—defined as effectively allocating time to different entrepreneurial activities based on their urgency and importance—may provide entrepreneurs from lower occupational classes a viable option to overcome their initial

\* Corresponding author at: School of Business, Renmin University of China, Beijing 100872, China.

E-mail addresses: [gejianhua@rmbc.ruc.edu.cn](mailto:gejianhua@rmbc.ruc.edu.cn) (J. Ge), [joli@iu.edu](mailto:joli@iu.edu) (J.M. Li), [ericzhao@indiana.edu](mailto:ericzhao@indiana.edu) (E.Y. Zhao), [rmbcyangfan@ruc.edu.cn](mailto:rmbcyangfan@ruc.edu.cn) (F. Yang).

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resource deficiencies, particularly when it comes to intangible resources, such as human and social capital. Drawing insights from extensive research examining how occupational classes shape individuals' time attitudes and behaviors (Lamm et al., 1976; Gore, 2018; Guthrie et al., 2009), we further argue that while entrepreneurs from lower occupational classes can use time resourcefully to overcome their initial resource deficiencies, they may face greater difficulty in doing so because their socialization into resource-scarce environments and low-autonomy workplaces may stamp them with cognitive schemas that prevent them from resourcefully using time. Our empirical analysis of 8663 Chinese private entrepreneurs between 2006 and 2010 lends robust support to these arguments.

Our theory and findings enrich our understanding of social classes in entrepreneurship by revealing the dual mechanisms—resource endowments and cognitive schemas—underlying the observed perpetuation of class inequality in entrepreneurship. We also help advance the literature on entrepreneurial resourcefulness by demonstrating the importance of being resourceful with a fundamental resource—*time*—in mitigating resource constraints. Practically, our study suggests that empowering marginalized individuals and reducing inequality may require policy makers and relevant organizations to go beyond simply providing tangible support and devote more efforts to removing hidden constraints that entrepreneurs face.

## 1. Introduction

Entrepreneurship has been increasingly recognized as an important means to address societal challenges (Alvarez and Barney, 2014; Bruton et al., 2013; Mair and Marti, 2009; McMullen, 2011), including rising inequality, which remains a pronounced global challenge and has been exacerbated by the COVID-19 pandemic (Perry et al., 2021; United Nations, 2020). The belief is that implementing policy interventions to lower entrepreneurship entry barriers, especially for individuals from disadvantaged social groups, can promote economic autonomy, employment, and income generation, thereby reducing inequality and fostering upward social mobility (Lippmann et al., 2005; Quadrini, 2000). Although the much-loved “rags to riches” stories are not uncommon, research has constantly shown that individuals from higher social classes are better positioned to identify and exploit entrepreneurial opportunities (Anderson and Miller, 2003; Kim et al., 2006; Lim et al., 2016). If so, entry into entrepreneurship may drag lower-class individuals into even worse situations as they are likely to be pushed aside by higher-class entrepreneurs and may thus eventually fail to sustain their ventures.

To explain why entrepreneurs from lower social class groups are less likely to perform well, previous research has often pointed to resource deficiencies as the main answer (Anderson and Miller, 2003; Honig, 1998; Kim et al., 2006). Because higher classes confer individuals with privileged access to critical resources, individuals from lower social class groups can typically only afford lower levels of financial, human, and social capital for their ventures upon founding. While this line of research has provided useful insights into the constraints that lower-class individuals face in their entrepreneurial pursuits, our understanding of the role of social class in entrepreneurship remains partial when focusing solely on the resource-endowment mechanism. Social class is not merely an index that reflects differential material conditions but is also a potent and robust predictor of how people think and act (Côté, 2011; Kraus et al., 2011). Individuals tend to adopt certain cognitive patterns and behavioral norms that are congruent with the material conditions afforded by social classes, which shape their subsequent behaviors, oftentimes beneath consciousness (Côté, 2011; Kohn, 1977). Overlooking the cognitive and behavioral consequences of social class may be particularly concerning in the context of entrepreneurship because while a firm's initial resource level is important (Shane and Stuart, 2002), abundant research has shown that under-resourced entrepreneurs may employ resourcing strategies to turn the tide (e.g., Baker and Nelson, 2005; Winborg and Landström, 2001).

In this paper, we address this gap by illustrating how the *dual* mechanisms underlying the effect of social class on entrepreneurs—resource endowments and cognitive schemas—jointly shape entrepreneurial outcomes. In developing our hypotheses, we focus on individuals' occupation-based social classes because occupation has long been recognized as one of the most powerful indicators of socioeconomic status in sociology research (Connelly et al., 2016; Daniel, 1984; Parkin, 1972; Zhou and Wodtke, 2019). While prior research has suggested that social class may influence an array of entrepreneurs' thoughts and behaviors, we focus specifically on entrepreneurs' resourcefulness. Resourcefulness refers to the “boundary-breaking behavior of creatively bringing resources to bear and deploying them to generate and capture new or unexpected sources of value in the process of entrepreneurship” (Williams et al., 2021: 2), which is useful in helping entrepreneurs overcome resource constraints to sustain and grow their ventures.

Applying insights from the entrepreneurial resourcefulness literature, we argue that being resourceful with a fundamental resource—*time*—may provide entrepreneurs from lower occupational classes a viable option to overcome their initial resource deficiencies. We focus on time because while entrepreneurs from lower classes lack access to many resources, they enjoy equal access to time compared to other entrepreneurs, and time investment is essential to the development of critical entrepreneurial resources, particularly when it comes to intangible resources, such as human and social capital (Hitt and Duane, 2002). The literature has shown that entrepreneurs engage in three main types of daily activities: internal-oriented management activities (e.g., working on product development, administrative work, employee training), external-oriented networking activities (e.g., contacting existing and potential customers, dealing with investors), and personal education (i.e., learning) (Van de Ven et al., 1984). Accordingly, we define the resourceful use of time as effectively allocating time to different entrepreneurial activities based on their urgency and importance. Drawing insights from extensive research examining how occupational classes shape individuals' time attitudes and behaviors (Lamm et al., 1976; Gore, 2018; Guthrie et al., 2009), we further argue that while entrepreneurs from lower occupational classes can use time resourcefully to overcome their initial resource deficiencies, they may face greater difficulty in doing so because their socialization into resource-scarce environments and low-autonomy workplaces may stamp them with cognitive schemas that prevent them from resourcefully using time.

We test our hypotheses in the context of private entrepreneurship in China, where occupation was an official standard used to classify individuals into different strata prior to the economic reforms in the 1970s and has remained a potent factor in contemporary

society (Bian, 2002; Wu and Xie, 2003). Considering the occupation-based social class system in Chinese society, we define entrepreneurs from higher social classes as those whose last occupations were cadres or managers of state-owned or collectively-owned enterprises (SOEs/COEs) and entrepreneurs from lower social classes as those who worked as workers or farmers prior to becoming an entrepreneur. Cadre- and manager-entrepreneurs are generally better educated and tend to have more management experience and stronger network relationships, indicating that they possess more human, political, and social resources compared to worker- and farmer-entrepreneurs. Our analysis of a national sample of 8663 Chinese entrepreneurs between 2006 and 2010 shows that compared to entrepreneurs from higher occupational classes (i.e., cadre- and manager-entrepreneurs), entrepreneurs from lower occupational classes (i.e., farmer- and worker-entrepreneurs) benefit more from investing time in learning and networking activities, and they suffer more if they misprioritize internal-oriented management activities. At the same time, however, we find that entrepreneurs from lower occupational classes (particularly farmer-entrepreneurs) are less likely to be resourceful with time.

Our study adds to the literature by theorizing the dual mechanisms—resource endowments and cognitive schemas—underlying the observed perpetuation of class inequality in entrepreneurship. We argue that entrepreneurs from lower social classes face cognitive constraints in addition to material deficiencies and that the former may be harder to erase and could be more consequential. In this regard, entrepreneurship policymaking aimed at empowering marginalized individuals and reducing inequality may need to go beyond simply providing tangible support and devote more efforts to removing hidden constraints that entrepreneurs face. Our study also extends research on entrepreneurial resourcefulness by revealing the importance of being resourceful with time in mitigating resource constraints. In addition, although studies have emphasized the intriguing power and effectiveness of entrepreneurial resourcefulness in overcoming resource deficiencies, we suggest that resourcefulness is powerful but not unbridled because resourcefulness might be cognitively constrained by entrepreneurs' social classes.

## 2. Theoretical framework

### 2.1. The influence of social classes on entrepreneurs' resource endowments

The concept of social class has attracted increasing attention in recent entrepreneurship research (e.g., Audretsch et al., 2013; Perry-Rivers, 2016), which is in part due to the positive role that entrepreneurship has been assumed to play in addressing societal challenges (Mair and Marti, 2009; McMullen, 2011). However, contrary to popular belief, several studies have documented that entrepreneurs from lower social class groups are less likely to discover and enact entrepreneurial opportunities (Baker et al., 2005; Lim et al., 2016). When they do embark on entrepreneurship, these individuals' business ventures are less likely to achieve high performance compared to those established by entrepreneurs from more advantaged groups (Anderson and Miller, 2003; Lora and Castellani, 2013; Rona-Tas, 1994; Wu and Xie, 2003).

To explain how entrepreneurs' social classes shape entrepreneurial processes and outcomes, prior research has focused on entrepreneurs' resource stocks or endowments as a major mechanism (Anderson and Miller, 2003; Constantinidis et al., 2019; Jayawarna et al., 2014; Kim and Aldrich, 2005). The theoretical root of this line of research can be traced to the classic belief that an individual's social class reflects “systematic differences in conditions of life” (Kohn, 1977: XVV) and gives rise to differential access to material resources, which in turn powerfully shapes important life outcomes. At the most basic level, individuals' material conditions create “opportunity gaps” that constrain their subsequent choices (Bottero, 2005; Stephens et al., 2014). Better-paying and more prestigious jobs, for example, enable individuals to live in wealthy neighborhoods and attend exclusive social clubs, which open some doors that might be closed otherwise, including the discovery of profitable entrepreneurial opportunities (Baker et al., 2005; Lim et al., 2016), the development of social networks with business elites (Anderson and Miller, 2003), the attainment of highly influential managerial positions (Lee et al., 2021), etc.

Building on these premises, scholars have argued that because entrepreneurs' social classes provide them with different levels and types of resources (Stephens et al., 2007) and their personal resource stocks are a primary source of their ventures' initial resources (Ndofor and Priem, 2005), entrepreneurs from higher social classes are better equipped to exploit entrepreneurial opportunities and to grow their ventures (Robinson et al., 2007; Bian, 2002; Bian et al., 2005). For example, Anderson and Miller (2003) showed that entrepreneurs' social class backgrounds powerfully influence the development of their human and social capital, which leads to different levels of resource endowments among entrepreneurs and thereby shapes the profitability and growth potential of their business ventures. Rona-Tas's (1994: 41) vivid description of the entrepreneurship process also supports this argument: “those who had more initially gained more than those who started out with less.”

### 2.2. The influence of social classes on entrepreneurs' cognitive schemas

While this line of research has provided useful insights, focusing on entrepreneurs' resource endowments as the only mechanism may have created some blind spots in our understanding of the influence of social class on entrepreneurship. Indeed, a growing body of research has confirmed that individuals' social classes have psychological and behavioral consequences (Kohn, 1977; Kraus et al., 2012). In other words, individuals' social class backgrounds not only directly shape their differential access to resources and opportunities but also profoundly and persistently influence how they think and act (Pepper and Nettle, 2017; Stephens et al., 2007). In this view, as individuals socialize into social classes via a number of critical contexts, such as home, school, and workplace, they adopt certain cognitive patterns and behavioral norms that are congruent with the material conditions afforded by a certain social class. In turn, these cognitive patterns and behavioral norms shape their subsequent behaviors, oftentimes beneath consciousness (Manstead, 2018; Stephens et al., 2014). As Kraus et al. (2012: 547) noted, social class is “a set of shared social contexts that create class-specific

repertoires of values and behavioral scripts.” Therefore, individuals from different social class groups are expected to develop different patterns of thoughts and behaviors through socialization experiences.

The powerful effects of social class on individuals' thoughts and behaviors have been widely confirmed in various domains. For example, within psychology, scholars have established the relationship between higher social classes and a stronger sense of optimism and control over life (Chen et al., 2002), a lower prevalence of depression and anxiety (Black and Krishnakumar, 1998), and a more extended future orientation (Lamm et al., 1976). Management scholars have been particularly interested in understanding how individuals' social class backgrounds leave “cognitive residues” on them and shape their behavior in organizational contexts (Côté, 2011: 59). Empirical research to date has found that executives' social class backgrounds profoundly shape their strategic decision-making (Kish-Gephart and Campbell, 2015), openness towards employee downsizing (van Aaken et al., 2022), and effectiveness as leaders (Martin et al., 2016). Following this logic, we expect entrepreneurs' social classes to profoundly shape their thoughts and behaviors. Despite the seemingly apparent linkage, to the best of our knowledge, there has been no explicit consideration of this mechanism in entrepreneurship research. To draw the connection, we focus on examining the influence of social classes on entrepreneurs' resourceful behaviors, which have been shown to be useful in helping entrepreneurs overcome resource constraints to sustain and grow their ventures.

Although scholars have explored an ever-widening range of resources entrepreneurs can be resourceful with, the entrepreneurial resourcefulness literature has yet to explicitly consider one “fundamental resource”—time (Aeon and Aguinis, 2017: 321). We pay close attention to the resourceful use of time because the development of resources (particularly intangible resources, such as human and social capital) often requires a significant amount of time investment from entrepreneurs (Hitt and Duane, 2002). Time is arguably the scarcest resource because any activities require time investment, yet time is finite and nonrenewable (Aeon and Aguinis, 2017). In addition, time is unique in that it is a resource possessed in equal amounts by everyone (McGrath and Rotchford, 1983), but the same amount of time can produce varying outcomes depending on how it is used by different people (Okada and Hoch, 2004). As such, we expect that the resourceful use of time—a valuable and rare resource at hand—is critical in helping entrepreneurs from lower social classes mitigate their initial resource deficiencies.

Although entrepreneurs from lower social classes could potentially overcome resource deficiencies by being resourceful with time, whether they enact such resourceful behaviors remains an underexplored question. Prior research has pointed to several ways that individuals' social class backgrounds may shape their attitudes towards time and consequently their actions (Gore, 2018; Guthrie et al., 2009). First, individuals' access to resources has been theorized as one of the key determinants as to whether they are more future-oriented or present-oriented. In general, individuals with relatively sufficient resources tend to focus more on the future, while those lacking resources are likely to attend to the present (Guthrie et al., 2009; Liu et al., 2004). Second, research has established the relationship between occupation prestige and individuals' attitudes regarding time and beliefs about how time should be managed (Macan, 1994; Nonis et al., 2005). Building on these insights, we argue that entrepreneurs from lower social classes may be unlikely to resourcefully use time to develop resources because their experiences in lower classes stamp them with a present-oriented time perspective and low awareness of time management.

Overall, our theoretical framework comprises two central propositions: (1) *being resourceful with time enables entrepreneurs from lower social classes to compensate for their initial resource deficiencies, yet* (2) *the cognitive schemas stamped on them by their social classes may prevent them from doing so*. Centering on these propositions, we next develop a set of hypotheses focusing specifically on how occupation-based social classes relate to ventures' initial resource stocks and entrepreneurs' resourceful behaviors regarding time. We chose to focus on occupation-based social classes for several reasons. First, across different contexts, occupation has been recognized as one of the most powerful indicators of socioeconomic background in sociology research (Connelly et al., 2016; Daniel, 1984; Zhou and Wodtke, 2019). Second, the workplace has been regarded as a critical context that gives rise to patterned distinctions in individuals' thoughts and behaviors, along with family and school (Ridgeway and Fisk, 2012; Stephens et al., 2014). More importantly, to the extent that later socialization experiences leave individuals with cognitive stamps that “layer upon” old ones (Marquis and Tilcsik, 2013: 221), socialization experiences in the workplace could potentially have a more powerful influence on individuals' subsequent behaviors than those in the family or school (Marquis and Tilcsik, 2013). As such, we focus on occupation-based social classes to derive hypotheses in the next section.

### 3. Hypotheses

#### 3.1. Differential returns on the resourceful use of time among entrepreneurs from different occupational classes

Social classes shape individuals' lives by providing them with or excluding them from access to critical resources (Kraus et al., 2012). Since initial resource endowments affect new ventures' short-term survival and long-term growth, compensating for the lack of critical entrepreneurial resources becomes an essential task for entrepreneurs from lower occupational class groups. Among all types of resources, human and social capital are unique and rare resources that are highly valuable in entrepreneurship (Davidsson and Honig, 2003; Sanders and Nee, 1996), but these resources are unlikely to be developed without entrepreneurs' investment of time and effort (Hitt and Duane, 2002). While lower-class entrepreneurs may be expected to invest as much time and effort as they can in developing such capital, time is a finite and valuable resource itself, and time allocation inherently involves tradeoffs among multiple tasks; overinvesting time in one task means not sufficiently pursuing other tasks (Brush et al., 2002). Therefore, we contend that resourceful use of time is achieved when entrepreneurs effectively allocate time to entrepreneurial activities based on their urgency and importance.

Since the publication of Mintzberg's (1973) seminal work identifying ten roles managers play, studies within management have

tried to understand the diverse range of tasks that managers (Kotter, 1982; Luthans, 1988) and entrepreneurs (Mueller et al., 2012) perform and the performance implications of their time allocation. While managerial work is characterized by high activity fragmentation (Mintzberg, 1973), Van de Ven et al. (1984) identified three main categories of activities that executives of startups perform. In particular, they found that executives allocated 56.6 % of their working time to internal-oriented activities, 37.5 % to external-oriented activities, and 4.5 % to personal education (Van de Ven et al., 1984).

Because entrepreneurs from lower occupational classes generally have less human and social capital compared to those from higher occupational classes, we expect that more time invested in learning and networking activities could help entrepreneurs from lower occupational classes overcome their initial resource deficiencies compared to their more advantaged counterparts and contribute to their ventures' performance. To begin with, we expect the return on time invested in learning activities to be significantly higher for lower-class entrepreneurs than for higher-class entrepreneurs for two main reasons. First, the knowledge and skills acquired through learning improve individuals' cognitive capabilities and enhance their productivity in future activities (Becker, 2009). Individuals from higher occupational classes are likely to have rich management and supervisory experience that provides them with general human capital, such as management knowledge and skills, thereby enabling them to manage their ventures with higher efficiency compared to lower-class entrepreneurs. In comparison, entrepreneurs from lower occupational classes, who arguably possess little management knowledge and few management skills when they first become entrepreneurs, can acquire such knowledge and skills through learning and training within the context of their ventures. While higher-class entrepreneurs may continue to benefit from investing time to develop their human capital, especially their firm-specific knowledge and skills, the reward of such investment is likely smaller than that enjoyed by lower-class entrepreneurs.

Second, in the context of entrepreneurship, scholars have proposed that easily observable indicators of human capital, such as education level and work experience, serve as signals of entrepreneurs' competence and are used by external stakeholders, such as customers, investors, potential partners, and employees, as filters to select high-potential firms (Brüderl et al., 1992). Supporting this argument, Zacharakis and Meyer (2000) found that management skills and experience are the most frequently used selection criteria among venture capitalists. Accordingly, entrepreneurs from lower occupational classes may gain significant benefits if they proactively send out signals that demonstrate their competence (e.g., by pursuing executive education in distinguished schools), whereas higher-class entrepreneurs may gain fewer benefits from doing so since their past career experience already serves as such a signal and thus wins them recognition. Taken together, we expect that the marginal return of time invested in learning activities is greater for entrepreneurs from lower occupational classes than for entrepreneurs from higher occupational classes. Accordingly, we propose the following:

**Hypothesis 1a.** The relationship between time invested in learning activities (i.e., learning time) and venture performance is moderated by entrepreneurs' occupation-based social classes such that the relationship is more positive for entrepreneurs from lower classes than for those from higher classes.

Similarly, we expect the return on time invested in networking activities to be significantly higher for entrepreneurs from lower occupational classes than for those from higher occupational classes. Debates exist in the literature regarding what properties of social networks contribute most to entrepreneurial success (Stam et al., 2014), for example, strong versus weak ties (Evald et al., 2006) and bonding versus bridging social capital (Batjargal, 2010; Hansen, 1995; Obstfeld, 2005; Tan et al., 2015). Nonetheless, scholars generally believe that social capital is critical to entrepreneurial performance (Anderson and Miller, 2003). As Davidsson and Honig (2003: 303) noted, "entrepreneurs would be well advised to develop and promote networks of all sorts." Indeed, scholars have identified a number of benefits associated with entrepreneurs' network ties, including timely information (Bhagavatula et al., 2010; De Carolis and Saporito, 2006), lower uncertainty and transaction costs (Luo, 2003), and access to additional resources from external stakeholders (Hsu, 2007; Kim and Aldrich, 2005; Manolova et al., 2006).

Since lower-class entrepreneurs often have few ties with members in the entrepreneur strata initially, investing time in external networking activities is highly rewarding for them as the business connections and social capital they accumulate from doing so can be of great value in filling information, resource, and institutional voids (Ge et al., 2019). In comparison, for higher-class entrepreneurs who have already developed useful networks through their earlier career experiences, maintaining and adjusting existing networks are important but may not necessarily bring additional immediate benefits. The differential return on time investment in networking for entrepreneurs from different occupational classes is likely even more striking when considering their political connections, which have been shown to be a critically important resource for new ventures in China (Li and Zhang, 2007; Peng and Luo, 2000; Xin and Pearce, 1996). In this regard, lower-class entrepreneurs who have few connections with political elites prior to entering entrepreneurship may benefit significantly from spending time on cultivating relationships with government officials. Therefore, we hypothesize the following:

**Hypothesis 1b.** The relationship between time invested in networking activities (i.e., networking time) and venture performance is moderated by entrepreneurs' occupation-based social classes such that the relationship is more positive for entrepreneurs from lower classes than for those from higher classes.

Despite the theorized importance of learning and networking for lower-class entrepreneurs, both prior research and the data we collected for empirical analysis have shown that entrepreneurs tend to allocate more attention to internal-oriented management activities on average (Van de Ven et al., 1984). This time allocation is not surprising given that management activities, such as setting strategic goals and plans and coordinating between teams, are of great significance for all entrepreneurs and their firms regardless of their socioeconomic backgrounds. However, when comparing entrepreneurs from different social classes, we expect that the return on time invested in management activities is significantly lower for lower-class entrepreneurs than for their higher-class counterparts. We

expect this effect because having more human capital enables entrepreneurs to perform generic entrepreneurial tasks more efficiently and effectively, including routine management tasks (Anderson and Miller, 2003; Unger et al., 2011), and social capital can bring them valuable information and additional resources (Davidsson and Honig, 2003; Stam et al., 2014). Thus, considering the opportunity cost of time, lower-class entrepreneurs, who generally lack human and social capital, may gain more benefits from prioritizing networking and learning activities over management activities compared to higher-class entrepreneurs. In contrast, higher-class entrepreneurs, whose ventures are already endowed with more human and social resources compared to their disadvantaged counterparts, may benefit more from investing time in management activities.

Since time allocation across multiple activities inevitably involves tradeoffs, we argue that the strategic allocation of time is based on the relative importance and urgency of different activities to the focal entrepreneur. As discussed, investing time in internal-oriented activities like routine management is least beneficial for lower-class entrepreneurs yet most beneficial for higher-class entrepreneurs. Accordingly, we propose the following:

**Hypothesis 1c.** The relationship between time invested in management activities (i.e., management time) and venture performance is moderated by entrepreneurs' occupation-based social classes such that the relationship is more positive for entrepreneurs from higher classes than for those from lower classes.

### 3.2. Lower occupational classes as constraints on entrepreneurs' resourceful use of time

We have thus far focused on resourceful time allocation as a potential mechanism lower-class entrepreneurs can use to cope with resource deficiencies. However, extensive research has shown that different material conditions may leave cognitive stamps on individuals that persistently and profoundly shape their thoughts and behaviors (Côté, 2011; Manstead, 2018; Stephens et al., 2007), suggesting that social class could be a key factor that enables or constrains entrepreneurs' resourceful use of time. Specifically, we argue that entrepreneurs from higher social classes have a higher likelihood of resourcefully using time than those from lower social classes.

First, lower-class entrepreneurs may be unlikely to allocate sufficient time to networking and learning activities because they tend to be more present-oriented (as opposed to future-oriented). The influence of individuals' social classes on their time perspective has been a topic of long-standing interest (LeShan, 1952; O'Rand and Ellis, 1974; Schmidt et al., 1978). Research has shown that individuals' social classes critically shape their attitudes regarding time and their beliefs about how time should be managed. In general, individuals from higher classes with relatively sufficient resources tend to be more future-oriented (as opposed to present-oriented) (Blustein et al., 2002; Guthrie et al., 2009; Schmitt et al., 2020), and they "more often engage in planning, set long-term goals, develop achievement motivation and the like" (Koenig et al., 1981: 124). Applying this logic, we expect that while developing human and social capital is critical for entrepreneurs from lower occupational classes, their focus on the present may lead them to attend more to internal-oriented management activities, which are often must-dos, and ignore networking and learning activities that do not have a due date and require continuous efforts.

Second, building on the idea that individuals occupying positions with greater job autonomy are likely to have a stronger awareness of the importance of time management, we argue that entrepreneurs from higher occupational classes are more likely to resourcefully allocate their time. While seemingly counterintuitive, having weak or nonexistent beliefs that time is a resource (i.e., having "low temporal awareness") is not uncommon. As Aeon and Aguinis (2017: 319) noted, "most people would agree with the statements 'time is finite' and 'time should be budgeted like money,' but not everyone actually conceives of time that way in daily life." Our understanding of time is significantly influenced by the nature of our work (Subrt, 2021). Research has shown that job autonomy is a key determinant of temporal awareness. In general, individuals are more likely to appreciate the value of time management when their posts confer substantial freedom and discretion in their work (Macan, 1994; Nonis et al., 2005; Sadler-Smith et al., 2003). This is because the less structured the job (e.g., supervisor and manager), the more likely people holding that job will have the opportunity and need to engage in time management-related activities (e.g., setting goals, prioritizing tasks, scheduling, monitoring, adjusting time usage, etc.) (Macan, 1994). Therefore, entrepreneurs from lower occupational classes may not have developed the awareness that effective time management is itself an important task in the first place.

Furthermore, we expect the constraining effect of entrepreneurs' lower occupational classes on effective time management to be particularly salient when it comes to awareness of the importance of nonroutine tasks, such as networking and learning. Entrepreneurs from lower occupational classes, who arguably carry out routinized activities following predefined procedures most of the time, may have limited awareness and appreciation of how spending time to establish and maintain relationships can provide invaluable information and opportunities. Moreover, since working as a farmer or worker involves mostly repetitive behaviors based on a standard repertoire of knowledge and skills, continuous learning may appear to be less important for these individuals compared to individuals who carry out more complicated jobs and constantly face challenges. These deeply entrenched cognitive schemas and behavioral norms developed through entrepreneurs' early work experiences may lead to rigidities and interfere with effective behavior and thinking (Dokko et al., 2009), resulting in a lower probability of them allocating time strategically compared to higher-class entrepreneurs.

In sum, we argue that due to their lower level of job autonomy, the resource-constrained environments they are embedded in, and the reduced complexity of their previous posts, lower-class entrepreneurs are more likely (than higher-class entrepreneurs) to bear cognitive schemas that become liabilities constraining their resourceful use of time and impeding their transition into successful entrepreneurship. Therefore, we hypothesize the following:

**Hypothesis 2.** Lower-class entrepreneurs, compared to higher-class entrepreneurs, are less likely to be resourceful in using time (i.e.,

allocating time across learning, networking, and management activities based on their urgency and importance).

It should be noted that we have focused on the role of cognitive schemas as the primary mechanism to explain the heterogeneous effects of social classes on the resourceful use of time given our motivation to reveal the dual mechanisms underlying the influence of social classes on entrepreneurs. However, we acknowledge that this observed pattern may be subject to alternative explanations. For example, one possibility is that entrepreneurs from lower social classes may lack access to opportunities to develop human and social capital even if they are eager to invest time in these activities.<sup>1</sup> Although our data does not allow us to directly test entrepreneurs' cognitive schemas and establish them as the sole mechanism, we sought to rule out such alternative explanations by including various indicators of entrepreneurs' socioeconomic status and political connections as controls in our empirical analysis.

## 4. Methods

### 4.1. Empirical setting

To test our theoretical framework, we needed a setting where different occupation-based social class groups have unequal access to entrepreneurial resources and where under-resourced entrepreneurs are less likely to achieve success. We believe China provides a context that fulfills these criteria. In China, occupation was an official standard used to classify individuals into different social groups prior to the market reforms in the 1970s and has continued to have a powerful influence on society even after the market reforms (Bian, 2002; Wu and Xie, 2003). In general, it divided the population into four distinctive groups: cadres, managers of SOEs or COEs, workers, and farmers. According to this classification, cadre-entrepreneurs are those who were in a managerial position in the Communist Party of China (CPC), the government, or the armed forces before they became entrepreneurs; manager-entrepreneurs are those who were previously in a managerial position in SOEs or COEs; worker-entrepreneurs are those who previously worked in SOEs, COEs, or private enterprises without holding a managerial position; and farmer-entrepreneurs are those who previously engaged in agriculture.

Despite the popular wisdom that socialist societies experience less stratification due to more egalitarian policies and the suppression of private property ownership (Parkin, 1972), sociologists have maintained that substantial inequality exists in state socialist regimes just like in market economies, albeit for different reasons (Nee and Stark, 1989; Szelenyi, 1978, 1983). In market economies, economic productivity is the primary determinant of individual gain, whereas in socialist societies, where the allocation of goods and services is guided by central direction and enforced through redistribution, political loyalty is the basis for reward (Szelenyi, 1983). In pre-reform China, administrative and political elites held significant power and privilege. Cadres played the role of redistributors and controlled the allocation of housing and goods in local communities. As a result, they were able to develop relationships not only with other redistributors but also with direct producers (farmers and ordinary workers), thus accumulating considerable social resources (Walder, 1989). This institutionalized inequality, together with few chances for occupational mobility (Bian, 2002), resulted in a rigid social class hierarchy in China underpinned by individuals' occupations. Along the hierarchy, cadres stood at the top and enjoyed much better pay and superior housing, among other benefits, whereas workers and farmers occupied lower positions and lived bleaker lives (Whyte, 2005).

Since the launch of China's economic reform in the late 1970s, the market has gradually replaced the state as the guiding mechanism for resource allocation. This transition has eroded the institutional foundation of social inequality resulting from China's previous redistributive arrangements, and cadres lost the power and privilege associated with their appointments as redistributors following the demise of the central planning and redistribution system (Nee and Matthews, 1996). In the meantime, as changes in economic institutions legitimated private property ownership and private businesses, entrepreneurial opportunities have emerged in the market economy. As Bian (2002: 91) described, "occupational mobility, a rare opportunity under Mao, is becoming a living experience for many Chinese in light of [the] emerging labor market."

On the surface, it seems that as the institutional barriers to career mobility were removed and opportunities sprung up, farmers and workers should have had increasing opportunities to quickly improve their lives by participating in market activities. However, the emergence of the market has by no means benefited each individual identically (Bian and Logan, 1996; Wu and Xie, 2003). Instead, this market emergence has provided abundant opportunities for political and administrative elites to easily convert their political power and social relationships into economic gain and to preserve their advantaged positions in the socioeconomic hierarchy (Ronatas, 1994). As marketization proceeded in China, an increasing number of cadres and managers started to embark on entrepreneurial opportunities in the growing market economy and quickly pushed aside some of the early market pioneers, especially individuals of lower socioeconomic backgrounds (Zhou and Xie, 2019). By jumping into the sea of business (*xiaohai*), cadres and managers in SOEs/COEs—the two most privileged groups in the early stage of the reform—have cashed in on their political and social capital in the first few decades following the reform and gained excessive profits compared to individuals without such backgrounds (Nee and Matthews, 1996; Wu and Xie, 2003). Therefore, although income inequality in China initially decreased following the economic reforms, it soon began to rise again as cadres and managers of SOEs/COEs ventured into entrepreneurship and achieved more success compared to farmers and workers given their more advantageous access to resources (Nee and Matthews, 1996; Nee and Stark, 1989). Empirical evidence supports the baseline expectation that cadres and managers in SOEs/COEs have relative advantages over workers and farmers in entrepreneurship, as we will discuss in the Results section below. Therefore, we believe that the China context provides an ideal setting for testing our theoretical framework.

<sup>1</sup> We thank the anonymous reviewers for pointing out this alternative explanation.

## 4.2. Data

The data used in the empirical analysis were collected from a multi-wave nationwide survey of Chinese privately-owned enterprises (POEs) conducted jointly by several national organizations, including the All-China Federation of Industry and Commerce, the State Administration for Industry and Commerce, and the Chinese Academy of Social Science. The survey has been conducted every two years since 1993. In each survey wave, the sample is generated using a stratified multistage sampling method to ensure full coverage of POEs operating in all 31 provinces across all industries, which guarantees a high degree of representativeness. Intensive interviews are then conducted with the majority owners of the firms<sup>2</sup> selected in the samples using a questionnaire to collect data on numerous issues, such as firm attributes and performance and owner demographic characteristics, family background, and occupational history, among others. These highly systematic and comprehensive data on Chinese POEs and entrepreneurs have been an important resource for policymakers (Chen et al., 2019). These data have also been increasingly used by management and entrepreneurship scholars for academic research (e.g., Ge et al., 2019; Ji et al., 2021; Jia, 2014; Marquis and Qiao, 2020).

The data used in our analysis were collected from the 2006, 2008, and 2010 waves because our main variables of interest (i.e., entrepreneurs' time allocation and social classes) were measured consistently across these three waves. Constructing this pooled cross-sectional dataset enabled us to increase the sample size and expand the period analyzed. For these three rounds of data collection, we obtained 3837, 4098, and 4614 valid responses (firms), respectively. After merging the three original datasets and removing observations with missing values on the main variables (i.e., venture performance, social class, and time allocation), we obtained a final sample of 8663 firms. We conducted *t*-tests to verify that nonresponse bias is not a concern in this sample.

## 4.3. Main variables

### 4.3.1. Venture performance

Following previous research on entrepreneurial performance and business success (Chrisman et al., 2005; Read et al., 2009), particularly research on small or medium-sized ventures in China (Lau and Bruton, 2011; Opper and Burt, 2020), we used logged *annual sales* (in 10,000 RMB) as the measure for venture performance, our dependent variable in models testing [Hypotheses 1a, 1b, and 1c](#).

### 4.3.2. Entrepreneurs' social classes

As theorized earlier, we captured entrepreneurs' social classes by investigating their occupational histories before they established their ventures. Empirically, we coded five dummy variables: *cadre*, *manager*, *worker*, *farmer*, and *other occupations*. While our theory focused on conceptualizing key distinctions between entrepreneurs from high versus low occupational classes, our empirical data allowed us to capture more nuanced distinctions between these four occupational classes; we thus followed the original data structure in the hope of gleaning more insights. Regarding occupational histories, an entrepreneur may have had different job experiences and was able to indicate multiple occupations in his or her response (e.g., worker and manager). Since we were only concerned about the social class that most profoundly influenced each entrepreneur, in each case, we opted for the occupation that accorded the entrepreneur the highest socioeconomic status, which would confer the entrepreneur the most advantages in entrepreneurship. This scenario occurred when the focal entrepreneur had been both a farmer or a worker and a cadre or a manager. In this case, we kept the cadre or manager origin. This approach also captured each entrepreneur's occupation immediately before starting his or her business because people in China usually grow and develop along the track from farmer/worker to manager/cadre; the opposite career path is rare.

More specifically, we used the following procedure to code entrepreneurs' social classes. First, *cadre* was coded 1 if the entrepreneur had previously served as a leader in a party, government organization, or public institution and 0 otherwise. Second, *manager* was coded 1 if the entrepreneur had been a middle or senior manager in an SOE or COE and had not held a cadre position and 0 otherwise. Third, *worker* was coded 1 if the entrepreneur was an employee in an enterprise and had not held a cadre or manager position and 0 otherwise. Fourth, *farmer* was coded 1 if the entrepreneur was a farmer prior to starting a business and did not belong to any of the categories above and 0 otherwise. Finally, the remaining group of *other occupations* was coded 1 if the entrepreneur's previous career experiences could not be categorized into any of the four groups above, which happened if the entrepreneur was a student studying abroad, a soldier, unemployed, or otherwise unspecified. Following this coding procedure, after one variable was coded 1, the remaining four would all be coded 0. In our sample, the percentages of entrepreneurs with social classes of cadre, manager, worker, and farmer are 16 %, 20 %, 34 %, 7 %, respectively.

### 4.3.3. Entrepreneurs' time allocation

Before running the analysis, we first examined whether the overall time-allocation pattern of Chinese entrepreneurs is consistent with existing research. The survey includes a question asking entrepreneurs to recall how much time they spent on average on internal-oriented tasks (i.e., management time), external-oriented tasks (i.e., networking time), learning activities (i.e., learning time), and sleep or other activities unrelated to entrepreneurship each day. According to the questionnaire, internal-oriented tasks include all

<sup>2</sup> The Handbook of Survey Instructions indicates that the selected interviewee of a sampled firm should be its majority owner. In our sample, 36 % of the surveyed firms had only one owner (the average number of firm owners is 2.88), and 90 % of the majority owners were also the CEOs of their own firms (cf. Jia, 2014).

routine management activities, such as developing goals, setting strategic plans, coordinating between departments, and motivating employees; external-oriented tasks are mainly related to developing and managing external relationships and social networks, such as establishing collaborations with media and business contacts, attending meetings and events, etc.; and learning activities include things like taking classes, reading books, pursuing a degree, etc. Accordingly, we coded relevant data into three continuous variables—*management time*, *networking time*, and *learning time*—to capture the time entrepreneurs invested in different activities. Data from the three survey years show that Chinese entrepreneurs spend an average of 7.4 h per day on routine management activities, 3.2 h on networking activities, and 1.7 h on learning activities, suggesting that the time Chinese entrepreneurs allocate to different activities is highly consistent with the time-allocation patterns of entrepreneurs in other countries (Van de Ven et al., 1984).

#### 4.4. Control variables

We controlled for an array of entrepreneur characteristics and firm attributes that may influence entrepreneurs' time-allocation decisions and venture performance. At the individual level, we controlled for basic demographic features, including *entrepreneur gender* (1 = male, 0 = female) and *entrepreneur age* (measured in number of years). Notably, we controlled for several demographic variables that have been shown to significantly influence venture performance, including *entrepreneur education*, a categorical variable indicating the entrepreneur's level of education (1 = elementary school and below, 2 = middle school, 3 = high school, 4 = junior college, 5 = university, 6 = graduate school); *party membership*, a binary variable indicating whether the entrepreneur was a member of the Chinese Communist Party (1 = yes, 0 = no); and *political connections*, a binary variable indicating whether the entrepreneur served as a representative on China's political councils, including the People's Congress (PC) and the Chinese People's Political Consultative Conference (CPPCC) (1 = yes, 0 = no). Education is a direct source of human capital, and political affiliation and political connections are important sources of social capital in China. In addition to individual characteristics, family also exerts a profound influence on entrepreneurial activities: an entrepreneur's family support may affect his or her initial resource endowment, and family responsibilities may affect an entrepreneur's dedication and time allocation. Therefore, we controlled for *family size*, measured as the number of family members living with the entrepreneur.

At the firm level, we controlled for *firm size*, measured as the logged number of employees; *firm age*, measured as the number of years since founding; and *privatization*, a binary variable indicating whether the firm was originally founded as an SOE or COE but was later transformed into a POE during market transition. Such privatized firms are likely to be endowed with more resources (Ji et al., 2021). Finally, we included *province* dummy variables to control for the firm's location, which may influence its resource endowments as regions in China vary significantly in their economic capacity and market-supporting institutions. We also included *industry* dummies to control for industry-specific effects on venture performance and *survey year* dummies to control for any unobserved survey wave-specific effects.

#### 4.5. Models

We conducted two sets of analyses to test [Hypotheses 1a, 1b, and 1c](#) and [2](#), respectively. We used ordinary least squares (OLS) estimation in both sets. To test [Hypotheses 1a, 1b, and 1c](#), we examined the relationship between the amount of time devoted to a task and venture performance contingent on entrepreneurs' social classes. [Hypothesis 2](#) concerns how entrepreneurs' social classes shape their time-allocation decisions. We tested this hypothesis by regressing the amount of time entrepreneurs devoted to each task on their social classes.

### 5. Results

[Table 1](#) reports the descriptive statistics and correlations of the variables. Note that the average total number of hours that entrepreneurs spend on management, networking, and learning activities is 12.3 h per day, suggesting that these three tasks are the major tasks entrepreneurs engage in daily. Overall, the magnitude of correlations among the variables is small. Still, we examined the variance inflation factors (VIFs) in the models to check for potential multicollinearity. The VIFs for the independent variables range from 1.06 to 4.14 with a mean VIF of 1.70, which is below the threshold value of 10 ([Greene, 2003](#)). Multicollinearity is thus not a concern in our analysis.

[Table 2](#) presents the results of our models testing [Hypotheses 1a, 1b, and 1c](#). Model 1 is a baseline model that includes all control variables. A few findings are worth mentioning here. At the individual level, gender plays a major role in determining venture performance; firms operated by male entrepreneurs tend to outperform those run by female entrepreneurs. In addition, higher levels of education, party membership, and political connections confer entrepreneurs greater advantages in their entrepreneurial endeavors and positively contribute to firm sales. At the firm level, larger firms, older firms, and those that were privatized from SOEs/COEs are more likely to have higher sales.

Our baseline expectation is that entrepreneurs who originate from cadre or manager groups are likely to perform better than entrepreneurs with farmer or worker origins. The results in Model 2 support this prediction: compared to the sales of firms owned by entrepreneurs with cadre or manager origins, the sales of firms owned by entrepreneurs with farmer or worker origins are significantly lower. The difference in sales of firms owned by cadre- and manager-entrepreneurs is not statistically significant. Model 3 adds the interaction terms between entrepreneurs' social classes and learning time to test [Hypothesis 1a](#). As predicted, we find that more learning time, combined with farmer or worker origins, significantly increases firm sales. [Fig. 1](#) illustrates this comparison, showing that return on learning time is higher for farmer- or worker-entrepreneurs than for cadre- or manager-entrepreneurs. Specifically,

**Table 1**  
Descriptive statistics and correlations.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Venture performance	6.511	2.288																	
2. Learning time	1.706	0.997	0.097																
3. Networking time	3.198	1.943	0.133	0.180															
4. Management time	7.422	2.567	-0.009	-0.010	-0.198														
5. Cadre	0.161	0.368	0.077	0.037	0.029	-0.010													
6. Manager in SOE/COE	0.196	0.397	0.131	0.023	-0.003	0.011	-0.217												
7. Worker	0.336	0.472	-0.088	-0.010	0.006	-0.002	-0.311	-0.351											
8. Farmer	0.066	0.249	-0.024	-0.055	-0.020	0.030	-0.117	-0.132	-0.189										
9. Other occupations	0.241	0.427	-0.077	-0.011	-0.017	-0.017	-0.247	-0.278	-0.400	-0.150									
10. Entrepreneur gender	0.856	0.351	0.134	0.008	0.062	0.000	0.041	0.071	-0.068	0.026	-0.041								
11. Entrepreneur age	45.415	8.444	0.174	-0.004	-0.047	0.047	0.118	0.175	-0.126	0.021	-0.137	0.098							
12. Entrepreneur education	3.490	1.166	0.052	0.025	-0.023	-0.018	0.033	0.079	-0.042	-0.063	-0.018	-0.002	-0.029						
13. Party membership	0.377	0.485	0.174	0.029	0.012	0.017	0.195	0.202	-0.176	-0.059	-0.127	0.114	0.205	0.053					
14. Political connections	0.438	0.496	0.367	0.097	0.114	-0.010	0.071	0.082	-0.073	-0.017	-0.046	0.079	0.157	0.020	0.116				
15. Family size	3.864	1.607	0.074	0.002	0.025	0.032	-0.017	-0.030	-0.016	0.082	0.012	0.088	0.077	-0.038	-0.001	0.110			
16. Firm size	3.934	1.523	0.723	0.100	0.139	0.008	0.067	0.123	-0.082	-0.034	-0.061	0.138	0.190	0.062	0.179	0.420	0.114		
17. Firm age	8.190	4.725	0.249	0.036	0.016	0.030	-0.003	0.013	-0.026	0.048	-0.009	0.054	0.262	0.026	0.026	0.280	0.110	0.263	
18. Privatization	0.181	0.385	0.216	0.026	0.016	0.013	0.088	0.226	-0.125	-0.061	-0.113	0.080	0.178	0.009	0.272	0.145	-0.010	0.247	-0.047

Note.  $N = 8663$ ; Correlations larger than  $|0.021|$  are statistically significant at the  $p < .05$  level.

**Table 2**  
Results of the regression models predicting venture performance.

Variables	Venture performance (sales)					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Entrepreneur gender	0.160** (0.049)	0.144** (0.049)	0.149** (0.049)	0.143** (0.049)	0.150** (0.049)	0.145** (0.049)
Entrepreneur age	0.000 (0.002)	-0.001 (0.002)	-0.002 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)
Entrepreneur education	0.029* (0.015)	0.023 (0.015)	0.022 (0.015)	0.024 <sup>†</sup> (0.015)	0.023 (0.015)	0.023 (0.015)
Party membership	0.121*** (0.035)	0.078* (0.036)	0.073* (0.036)	0.076* (0.036)	0.079* (0.036)	0.076* (0.036)
Political connections	0.359*** (0.037)	0.338*** (0.037)	0.347*** (0.037)	0.343*** (0.037)	0.349*** (0.037)	0.340*** (0.037)
Family size	-0.014 (0.010)	-0.011 (0.010)	-0.011 (0.010)	-0.011 (0.010)	-0.010 (0.010)	-0.011 (0.010)
Firm size	0.977*** (0.014)	0.970*** (0.014)	0.972*** (0.014)	0.969*** (0.014)	0.975*** (0.014)	0.968*** (0.014)
Firm age	0.018*** (0.004)	0.019*** (0.004)	0.019*** (0.004)	0.019*** (0.004)	0.019*** (0.004)	0.019*** (0.004)
Privatization	0.135** (0.044)	0.104* (0.044)	0.101* (0.044)	0.104* (0.044)	0.098* (0.044)	0.105* (0.044)
Learning time		0.037* (0.017)	-0.041 (0.036)			-0.039 (0.036)
Networking time		0.022* (0.009)		-0.003 (0.018)		-0.004 (0.018)
Management time		-0.013* (0.006)			-0.016 (0.013)	-0.016 (0.013)
Occupation-based social classes (ref: manager in SOE/COE)						
Cadre		0.023 (0.053)	-0.057 (0.109)	0.012 (0.101)	-0.107 (0.154)	-0.213 (0.219)
Worker		-0.161*** (0.046)	-0.358*** (0.090)	-0.309*** (0.087)	-0.125 (0.135)	-0.471* (0.185)
Farmer		-0.147* (0.070)	-0.510*** (0.130)	-0.461*** (0.133)	0.229 (0.207)	-0.389 (0.278)
Other occupations		-0.238*** (0.052)	-0.418*** (0.101)	-0.374*** (0.097)	-0.277 <sup>†</sup> (0.151)	-0.568** (0.200)
Learning time × cadre			0.047 (0.054)			0.046 (0.054)
Learning time × worker			0.112* (0.046)			0.101* (0.046)
Learning time × farmer			0.221** (0.072)			0.193** (0.074)
Learning time × other occupations			0.102 <sup>†</sup> (0.052)			0.087 <sup>†</sup> (0.053)
Networking time × cadre				0.005 (0.026)		0.006 (0.027)
Networking time × worker				0.045* (0.022)		0.037 (0.023)
Networking time × farmer				0.098* (0.039)		0.071 <sup>†</sup> (0.041)
Networking time × other occupations				0.042 (0.026)		0.036 (0.026)
Management time × cadre					0.018 (0.020)	0.019 (0.020)
Management time × worker					-0.005 (0.017)	0.002 (0.017)
Management time × farmer					-0.050* (0.025)	-0.038 (0.026)
Management time × other occupations					0.005 (0.019)	0.008 (0.019)
Constant	2.042*** (0.168)	2.198*** (0.186)	2.338*** (0.185)	2.257*** (0.187)	2.360*** (0.198)	2.442*** (0.221)
F	257.046	228.432	220.437	222.051	220.190	191.671
R <sup>2</sup>	0.579	0.581	0.581	0.581	0.581	0.582

Note. N = 8663. Province, industry, and survey year dummies are included in all models. Robust standard errors are in parentheses.

<sup>†</sup> p < .10.

\* p < .05.

\*\* p < .01.

\*\*\* p < .001.

taking the average learning time as the base, the marginal return (in annual sales) of one additional hour (mean + 1) of learning time per day for farmer- and worker-entrepreneurs (as the lower-class group) is 1,119,000 RMB<sup>3</sup> higher than that for cadre- and manager-entrepreneurs (as the higher-class group).

To test [Hypothesis 1b](#), Model 4 includes the interaction terms between entrepreneurs' social classes and networking time. The results show that more networking time interacts with entrepreneurs' farmer or worker origins to significantly increase firm sales, supporting [Hypothesis 1b](#). [Fig. 2](#) depicts the differential rewards of networking time across entrepreneurs from different social classes. In terms of the practical significance, the return (in annual sales) of one additional hour of networking time per day for farmer- and worker-entrepreneurs (as the lower-class group) is 508,500 RMB higher than that for cadre- and manager-entrepreneurs (as the higher-class group).

To test [Hypothesis 1c](#), Model 5 includes the interaction terms between entrepreneurs' social classes and management time. We find that more management time interacts with entrepreneurs' farmer origin to significantly decrease firm sales, partially supporting [Hypothesis 1c](#). The contrast of returns on management time among entrepreneurs from different social classes is illustrated in [Fig. 3](#). Specifically, the return (in annual sales) of one additional hour of management time per day for farmer- and worker-entrepreneurs (as the lower-class group) is 240,500 RMB lower than that for cadre- and manager-entrepreneurs (as the higher-class group). Model 6 is the full model. All the results remain consistent except two of the interaction terms (Networking time  $\times$  Worker and Management time  $\times$  Farmer) are no longer significant; this loss of significance is not surprising given the multicollinearity among the 12 interaction terms included in the full model. Overall, our findings suggest that compared to cadre- and manager-entrepreneurs, farmer-entrepreneurs benefit more from investing time in learning and networking activities than in management activities.

[Table 3](#) presents the results of the models testing [Hypothesis 2](#), which predicts that farmer- and worker-entrepreneurs are more likely to allocate time in suboptimal ways compared to cadre- and manager-entrepreneurs. To test this hypothesis, we specified three models predicting the time entrepreneurs allocate to learning, networking, and management activities, respectively. The results in [Table 3](#) show that although farmer-entrepreneurs stand to benefit most from investing more time in learning and networking activities (versus management activities), they instead invest a significant amount of time in management activities in practice, suggesting that their lack of human and social capital may be further aggravated by their mismanagement of time. In comparison, worker-entrepreneurs, who are also likely to benefit more from allocating more time to learning and networking activities compared to entrepreneurs of other occupations, appear to follow patterns similar to those of cadre- and manager-entrepreneurs, suggesting that they may have also missed the opportunity to mitigate their initial resource deficiencies and thus still face great challenges to outcompete their more resource-affluent counterparts.

The contrast revealed jointly by the results from [Tables 2 and 3](#) is intriguing. Besides lending support to our original hypotheses, which focus on the differential returns on time invested in different activities for entrepreneurs with high versus low occupational classes, this contrast offers additional insights regarding the distinctions between the four specific occupational classes, particularly between entrepreneurs with farmer and worker origins. A closer examination of the results in [Table 2](#) shows that the same amount of time invested in networking and learning activities is more rewarding for farmer-entrepreneurs than for worker-entrepreneurs. In addition, increasing time invested in management activities punishes farmer-entrepreneurs more than worker-entrepreneurs in the form of lower venture sales. These empirical results reveal that farmers, who have arguably been endowed with the least amount of human and social capital, are *most* in need of resourceful time management. However, as the results in [Table 3](#) show, they are *least* likely to use time resourcefully—that is, they are least likely to optimally allocate time across tasks based on their urgency and importance. We thus conclude that while the resourceful use of time is a theoretically powerful means whereby entrepreneurs from lower social classes compete with their more resource-affluent counterparts, in reality, resourcefulness is not unbridled but constrained by entrepreneurs' social classes.

## 6. Robustness checks and additional analyses

We conducted a series of supplementary analyses to further enhance the validity of our results. First, instead of separating entrepreneurs' social classes into four distinct groups, we used *higher social classes* to capture those entrepreneurs with cadre or manager origins and *lower social classes* to cover those with farmer or worker origins. We then retested our hypotheses using this classification. The pattern of differential returns on time invested in different activities between these two broad classes of entrepreneurs and their different time-allocation patterns are consistent with our main results (see [Tables A.1 and A.2](#) in the online appendix).

Second, in our initial coding of entrepreneurs' social classes, for those observations that indicated multiple occupations (around 25.6 % in our original sample), we determined an entrepreneur's social class by selecting the one that accorded the entrepreneur the highest socioeconomic status. As a robustness check, we limited our sample to those entrepreneurs who reported only one occupation before starting a business. The results based on this sample of entrepreneurs with clearer-cut social class origins remain robust (see [Tables B.1 and B.2](#) in the online appendix).

Third, considering venture size variation, we used *sales per employee* (annual sales divided by number of employees) as an alternative measure of venture performance and generated consistent findings (see [Table C](#) in the online appendix). Also, ventures' ages vary, and entrepreneurs' time-allocation patterns may shift as ventures grow. As a robustness check, we restricted our sample to new ventures under ten years old, which is a widely accepted criterion for defining a firm as a new venture (e.g., [Certo et al., 2001](#); [Forbes](#),

<sup>3</sup> The currency exchange rate is about 1 RMB = 0.16 USD in March 2022.

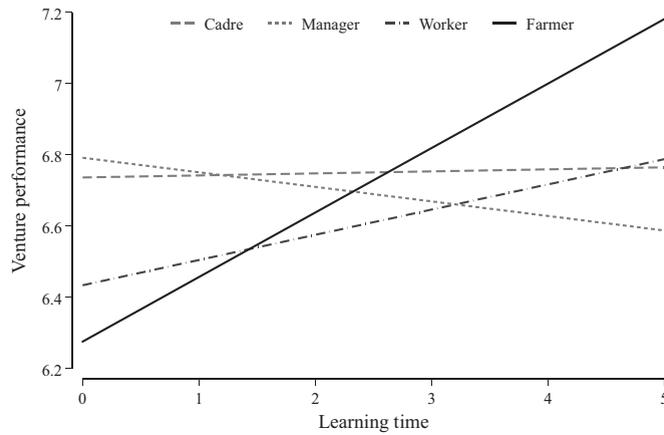


Fig. 1. Differential returns on learning time.

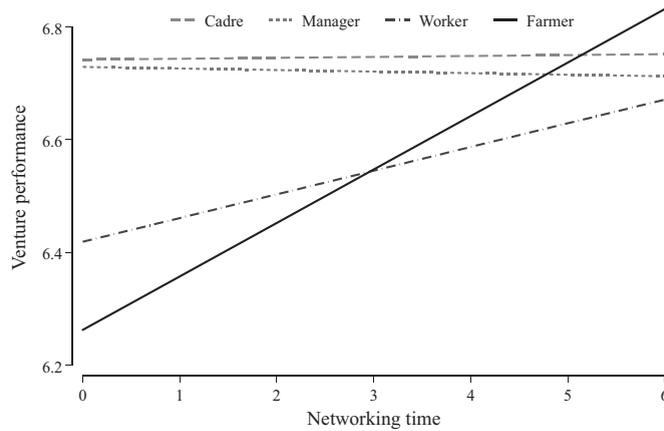


Fig. 2. Differential returns on networking time.

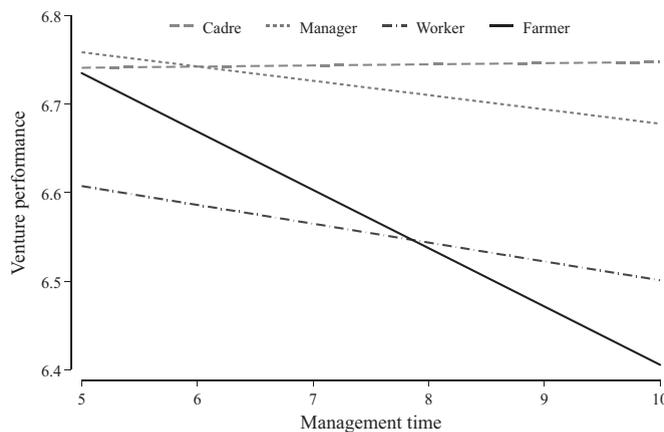


Fig. 3. Differential returns on management time.

2005; Gimmon and Levie, 2010; Ko and McKelvie, 2018). We retested our hypotheses using this subsample and generated largely consistent findings (see Tables D.1 and D.2 in the online appendix).

Fourth, instead of directly adopting the reported number of hours entrepreneurs spent on management, networking, and learning activities every day as the independent variables in estimating sales, we measured the *proportion of time allocation* by computing the ratio of time spent on each activity to the total time of the three activities; this approach captures the relative priority of multiple tasks for individual entrepreneurs. Our findings are again robust when we used these alternative measurements (see Tables E.1 and E.2 in

**Table 3**  
Results of the regression models predicting entrepreneurs' time allocation.

Variables	Learning time		Networking time		Management time	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Entrepreneur gender	-0.003 (0.032)	-0.003 (0.032)	0.218*** (0.058)	0.218*** (0.058)	-0.041 (0.079)	-0.043 (0.079)
Entrepreneur age	-0.003* (0.001)	-0.003* (0.001)	-0.019*** (0.003)	-0.019*** (0.003)	0.010** (0.004)	0.010** (0.004)
Entrepreneur education	0.029** (0.010)	0.026** (0.010)	-0.032† (0.019)	-0.035† (0.019)	-0.023 (0.025)	-0.017 (0.026)
Party membership	0.009 (0.024)	-0.006 (0.025)	0.004 (0.046)	-0.013 (0.046)	0.045 (0.061)	0.070 (0.063)
Political connections	0.116*** (0.025)	0.113*** (0.025)	0.313*** (0.048)	0.309*** (0.048)	-0.152* (0.063)	-0.145* (0.063)
Family size	0.001 (0.007)	0.003 (0.007)	0.007 (0.013)	0.009 (0.013)	0.062*** (0.018)	0.058** (0.018)
Firm size	0.051*** (0.009)	0.049*** (0.009)	0.156*** (0.018)	0.154*** (0.018)	0.018 (0.023)	0.021 (0.023)
Firm age	0.003 (0.003)	0.003 (0.003)	-0.008 (0.005)	-0.007 (0.005)	0.008 (0.007)	0.007 (0.007)
Privatization	-0.019 (0.030)	-0.030 (0.030)	-0.172** (0.060)	-0.180** (0.061)	0.019 (0.077)	0.028 (0.078)
Occupation-based social classes (ref: manager in SOE/COE)						
Cadre		-0.006 (0.036)		0.063 (0.071)		-0.114 (0.095)
Worker		-0.051 (0.032)		-0.015 (0.061)		0.001 (0.082)
Farmer		-0.201*** (0.049)		-0.135 (0.093)		0.320* (0.130)
Other occupations		-0.042 (0.035)		-0.044 (0.065)		0.022 (0.090)
Constant	1.649*** (0.112)	1.718*** (0.116)	3.818*** (0.216)	3.857*** (0.224)	6.590*** (0.283)	6.558*** (0.296)
F	6.893	6.752	11.533	10.729	4.206	4.133
R <sup>2</sup>	0.036	0.038	0.061	0.062	0.024	0.025

Note. N = 8663. Province, industry, and survey year dummies are included in all models. Robust standard errors are in parentheses.

† p < .10.

\* p < .05.

\*\* p < .01.

\*\*\* p < .001.

the online appendix). Moreover, in addition to networking time, entrepreneurs' *expenditures on public relations and entertainment activities* can also reflect their engagement in networking activities. Considering this, we compared the annual expenditures on these activities among entrepreneurs with different *social classes* and find that farmer- and worker-entrepreneurs spend significantly less on these networking activities (see Table F in the online appendix). This finding lends further support to our argument.

Fifth, reverse causality remains a concern because better-performing entrepreneurs might be more resourceful to engage in different activities (i.e., venture performance may affect time allocation). While we were not able to fully address this concern with our cross-sectional data, we used a subsample from the 2010 survey wave, which includes a question asking respondents to report venture performance for the three years preceding the survey year, to test whether entrepreneurs' time investment in different activities in 2009 could be affected by venture performance in 2008. The results show that previous venture performance has no significant impact on learning and networking time and has only a marginally significant negative impact on management time (see Table G in the online appendix), suggesting that reverse causality is unlikely to be a severe concern.

Sixth, retrospective bias has been considered a common concern when using survey data to capture life realities (e.g., time allocation). In our case, the three time variables were measured as entrepreneurs' averaged/regular time-allocation patterns; this approach mitigates retrospective bias compared with when entrepreneurs are asked to recall how they spent their time on certain days. Furthermore, we find that entrepreneurs' networking time and firms' expenditures on public relations are significantly correlated ( $r = 0.2$ ,  $p < .001$ ), which, to some extent, lends support to the reliability of the time data.

Finally, we acknowledge that the cross-sectional survey data we used are open to common method bias, particularly because our dependent variables and independent variables are derived from the same data source (Podsakoff et al., 2003). In this particular case, however, we are less concerned about such bias because the main variables we used in our analysis are derived from items that ask for facts, such as previous work experience, daily work routine, and firm sales, rather than personal opinions. In addition, because we derived our data from an authoritative large-scale nationwide survey, which was carried out anonymously, we believe the responses are generally reliable.

## 7. Discussion

This paper builds on and extends research on social classes in entrepreneurship and integrates insights from research on resourcefulness and time management to examine how entrepreneurs' occupational class backgrounds relate to entrepreneurial outcomes. Specifically, we build on the entrepreneurial resourcefulness literature to argue that entrepreneurs from lower social classes (compared with entrepreneurs from higher social classes) enjoy higher returns on time invested in networking and learning activities, which enable them to compensate for the initial resource deficiencies. In contrast, time invested in management activities generates less value for entrepreneurs from lower social classes than for their more advantaged counterparts. However, social classes not only affect individuals' access to resources, but also leave cognitive stamps on individuals that persistently and profoundly shape their thoughts and behaviors. Therefore, while being resourceful with critical resources at hand (in this case, time) may enable entrepreneurs from lower social classes to compensate for their initial resource deficiencies, the schemas developed from their social classes may prevent them from doing so. Analyzing data on a national sample of Chinese private entrepreneurs surveyed between 2006 and 2010, we found that optimizing time allocation to develop needed resources enables entrepreneurs from lower social classes to mitigate their ventures' competitive disadvantages due to initial resource deficiencies. However, these entrepreneurs are also less likely to enact optimal time-allocation plans due to the cognitive constraints they bear.

### 7.1. Implications for research on social class backgrounds in entrepreneurship

Individuals' social class backgrounds have been theorized to have a persistent and profound influence on them and have attracted increasing attention among entrepreneurship scholars. A handful of studies have theorized resource endowments as the primary channel through which entrepreneurs' social classes affect their ventures' performance (Anderson and Miller, 2003; Davidsson and Honig, 2003). More recently, an increasing number of studies have focused on the impact of organizational members' social class backgrounds on their thoughts and actions (Côté, 2011; Martin et al., 2016; Martin and Côté, 2019). To our knowledge, however, no research to date has integrated these two perspectives to offer a comprehensive investigation of how social class backgrounds affect entrepreneurs and their ventures' performance.

Our study develops a novel theoretical framework that illustrates how entrepreneurs' social classes shape not just their initial resource endowments but also their subsequent thoughts and behaviors. Specifically, we theorize and demonstrate that entrepreneurs' resourceful use of time can mitigate the resource constraints resulting from their lower social classes, but at the same time, the potential for resourceful time management to overcome these initial resource deficiencies is constrained by the cognitive schemas stamped on entrepreneurs by their social classes. Therefore, social classes may influence entrepreneurs' performance through two underlying mechanisms: initial resource endowments and subsequent cognitive stamps. Compared with the first mechanism, the second may have a more profound impact and may thus be more difficult to overcome for entrepreneurs from lower social classes. By emphasizing the overlooked mechanism of cognitive schemas through which social classes affect entrepreneurs and showing their power in shaping entrepreneurs' resourceful use of time, we provide a more comprehensive understanding of the role of social class in entrepreneurship.

### 7.2. Implications for entrepreneurial resourcefulness research

Our study contributes to the growing literature on entrepreneurial resourcefulness. The notion of resourcefulness has gained increasing interest among scholars. Abundant examples have shown that being resourceful helps entrepreneurial firms compensate for resource deficiencies and, more generally, enables them to better cope with uncertainty and adversity in the environment (Williams et al., 2021). While previous work has demonstrated how creatively deploying resources at hand, including cultural tools (Lounsbury and Glynn, 2001; Martens et al., 2007) and social relationships (Williams and Shepherd, 2018), can enable entrepreneurs to gain greater access to resources and thus lead to higher performance, our knowledge remains limited about how the resourceful use of time may help entrepreneurs thrive. We believe that expanding the notion of resourcefulness to include time is important because time is the most fundamental resource that everyone possesses in an equal amount, but it can be managed differently to reach different goals (McGrath and Rotchford, 1983; Okada and Hoch, 2004). As shown in our study, resourcefully allocating time across networking, learning, and management activities has the potential to enable entrepreneurs from lower social classes (particularly farmer-entrepreneurs) to mitigate their initial resource liabilities. Building on and moving beyond our current findings, future research can investigate in more detail how time spent on different tasks within each of the three categories of activities plays a role in affecting entrepreneurial outcomes. For example, insights into how entrepreneurs from different social classes spend time on initiating and/or maintaining relationships would be theoretically and practically interesting.<sup>4</sup>

In addition, our study adds to extant research on entrepreneurial resourcefulness by examining the antecedents of resourcefulness. Most research to date has theorized resourcefulness as an independent variable and has examined its impact on entrepreneurs' access to resources and their ventures' performance (Williams et al., 2021). Drawing on research viewing *social class* as a form of culture that gives rise to specific patterns of thinking and action congruent with an individual's material conditions (Kraus et al., 2011; Manstead, 2018; Stephens et al., 2014), our study reveals that social classes can enable or constrain entrepreneurs' resourceful use of time, thus

<sup>4</sup> We thank one anonymous reviewer for pointing out this future research direction.

representing an initial step in examining factors leading to entrepreneurial resourcefulness. Further, while we focused solely on individuals' social classes derived from previous occupations and workplace experiences, future research can investigate how individuals' socialization experiences into other "gateway contexts" (Stephens et al., 2014: 611), including family and school, exert a cultural influence on them and affect their resourceful behaviors.

### 7.3. Implications for research on the social impact of entrepreneurship

In the past decades, entrepreneurship has emerged as an important force to combat inequality (Lippmann et al., 2005; Lora and Castellani, 2013). One theme emerging from the growing body of research on the social impact of entrepreneurship is the notion of entrepreneuring as emancipation (Rindova et al., 2009). According to this view, entrepreneurship provides a channel for disadvantaged and marginalized individuals to break free from existing economic, social, and cultural constraints and change their fates (Chandra, 2017; Goss et al., 2011; Rindova et al., 2009). Despite the positive image of entrepreneurship, empirical studies evaluating the extent to which entrepreneurship fulfills its promise of emancipating socially or economically disadvantaged individuals have generated mixed results (Ruebottom and Toubiana, 2021). While some studies have found that engaging in entrepreneurship enables disadvantaged and marginalized individuals to emancipate themselves from constraints like poverty and outright discrimination because they are able to gain wealth and construct more positive social identities (Chandra, 2017; Datta and Gailey, 2012), others have shown that most entrepreneurs are unable to break free from their existing constraints (Goss et al., 2011; Jennings et al., 2016). These mixed findings lead to the concern of whether espousing entrepreneurship as the "magic weapon" of elevation and emancipation is overly romanticizing.

Scholars have recently tried to resolve the puzzle regarding the emancipatory potential of entrepreneurship by elucidating the nature of the constraints entrepreneurs face and the dynamics underlying their emancipatory efforts (Goss et al., 2011; Ruebottom and Toubiana, 2021). For example, Ruebottom and Toubiana (2021) proposed that emancipation through entrepreneurship may be better understood as a multifaceted process that involves loosening structural, cognitive, and emotional constraints. Depending on the specific context, entrepreneurship can be emancipatory and bring a sense of liberation to certain dimensions of entrepreneurs' work and personal lives by loosening some constraints but not others. Our study joins these recent efforts to clarify when and why entrepreneurship can be emancipatory by attending to the multifaceted nature of the emancipation process. We show that in the context of China, while resourcefully using time provides a plausible way for farmer- and worker-entrepreneurs to loosen their resource constraints, such an approach may rarely work in practice because these entrepreneurs bear cognitive schemas that hinder their ability to allocate time resourcefully across different activities. Consequently, disadvantaged individuals' engagement in entrepreneurship may result in the reproduction of, instead of a reduction in, inequality as these individuals are often unable to break free from their existing constraints.

In this regard, our findings have important implications for entrepreneurship policy and practice. Public policies aiming to promote entrepreneurship among disadvantaged individuals to address social problems like poverty and discrimination often do so by lowering the barriers to starting a business and providing tangible support, such as startup funding (Robinson et al., 2007; Shane, 2009). Our study suggests that such policies may just scratch the surface of the challenges disadvantaged entrepreneurs face and more need to be done in promoting and supporting entrepreneurship. In addition, entrepreneurship educators have a significant role to play in emancipating disadvantaged individuals by fostering cognitive and behavioral changes towards resourcefulness in time management. For potential and existing entrepreneurs, our study shows the importance of cultivating and developing the awareness and ability to resourcefully employ resources at hand to make up for deficiencies. In sum, by drawing attention to the influence of social classes on entrepreneurs' thoughts and actions, our study implies that efforts to mitigate entrepreneurs' cognitive constraints could make a world of difference for lower-class entrepreneurs and create real social impact, which deserves attention from policymakers, educators, and entrepreneurs alike.

### 7.4. Limitations and future research opportunities

Although our analysis leveraged the most comprehensive data available to date on a national sample of Chinese private entrepreneurs, we acknowledge several limitations that might be addressed in future research. First, our use of cross-sectional data gave rise to the endogeneity concern due to potential reverse causality (i.e., time allocation might be a result rather than a cause of venture performance). Thus, we caution against making strong causal inferences from our current findings. While we tried to alleviate this concern by conducting a supplementary analysis, as discussed above, fully addressing this endogeneity concern would require collective efforts from various parties (e.g., researchers, governments, entrepreneurs) to build a panel database and systematically track entrepreneurs and their ventures over a long period of time. Moreover, with access to longitudinal data, future studies may investigate the ultimate influence of resourcefulness, in particular, whether ventures that perform worse due to the entrepreneur's unresourceful use of time would eventually fail.<sup>5</sup>

Second, while we focused on theorizing cognitive stamps as one major mechanism through which social classes affect entrepreneurs' resourceful use of time, we acknowledge that alternative mechanisms may exist. To capture these alternative mechanisms, we controlled for a number of entrepreneur characteristics (e.g., education and network connections) that may result in alternative

<sup>5</sup> We thank an anonymous reviewer for pointing out this future research direction.

explanations. However, we were unable to completely rule out alternative explanations and establish cognitive stamps as the sole mechanism since we did not have data to directly measure and test such cognitive mechanisms. Future research may leverage other methods, such as experimental design, to offer a more direct test of the mechanism we proposed.

Third, while we developed and tested our hypotheses in the context of private entrepreneurship in China, where entrepreneurs' previous occupations are potent indicators of their social classes, future research may apply and extend our central propositions to other contexts where education or income is the most powerful indicator of one's social class (Lorant et al., 2003). More broadly, social inequality in many societies has been driven by factors beyond social class, including gender, race, and ethnicity (Gillborn and Mirza, 2000). Indeed, the entrepreneurship literature has documented that female and ethnic minority entrepreneurs face more challenges in the entrepreneurship process, including more difficulties in garnering the resources needed for venture growth and prosperity (Lora and Castellani, 2013; Marlow, 2014; Robinson et al., 2007; Thébaud, 2015; Zhao and Lounsbury, 2016; Zhao and Yang, 2021). Future research could consider these factors in discerning advantaged versus disadvantaged groups and testing the applicability of our theoretical framework.

Finally, we note that a growing body of research has shown the potential positive consequences of being in an impoverished environment (Miller and Le Breton-Miller, 2017).<sup>6</sup> The logic here is that challenging environments can trigger responses and adaptations that favor entrepreneurial endeavors and produce positive outcomes. While entrepreneurs' lower-class backgrounds may indeed foster adaptive behaviors that are conducive to entrepreneurship, our findings suggest that at least in our empirical context, lower-class entrepreneurs' backgrounds appear to be more constraining than stimulating in shaping their resourceful behaviors and, ultimately, their entrepreneurial outcomes. In fact, extant research has hinted at the potential two-sided effects of (lower) social classes on entrepreneurship: on the one hand, disadvantaged and marginalized individuals are less likely to discover and explore entrepreneurial opportunities due to the lack of access to information about opportunities and knowledge to evaluate them; on the other hand, the very groups that are denied access to privileges may be more motivated to search for alternative opportunities, thereby constituting a major force of opportunity discovery (Baker et al., 2005; Robinson et al., 2007). Furthermore, these individuals may be more likely to come up with more creative opportunities following an effectuation logic (Sarasvathy, 2001) and bring forward innovative solutions to achieve entrepreneurial success despite resource constraints (Lampel et al., 2014). Given this complexity, future research that more systematically investigates the positive and negative effects of social class on entrepreneurs would be fruitful.

## 8. Conclusion

Despite the popular belief that entrepreneurship can be a powerful tool to combat social inequality, evidence has shown that entrepreneurs originating from lower social class groups tend to underperform compared to those from higher social class groups. While existing research has primarily focused on differential access to resources as the key factor driving the perpetuation of inequality, our study adds to the literature by highlighting the underexplored mechanism of the psychological effects of occupational class. Specifically, we theorize that while being resourceful with a particular type of resource—*time*—is an important resourcefulness technique that helps entrepreneurs from lower occupational classes thrive, the cognitive schemas stamped on them by their social class backgrounds may undermine their ability to be resourceful. Our analysis of Chinese entrepreneurial firms shows that while resourcefully allocating time across multiple activities (e.g., learning, networking, and management) can enable farmer- and worker-entrepreneurs to reverse their initial competitive disadvantages compared to cadre- and manager-entrepreneurs, they are less likely to do so in reality. Our novel theoretical framework and empirical evidence thus contribute to the entrepreneurship literature by providing a more comprehensive picture of the role of social class in entrepreneurship. For policymakers and practitioners, one key insight from our research is that lower-class entrepreneurs are more likely to go from rags to riches through entrepreneurship when intentional efforts are undertaken not just to relieve their visible material hardships but also to reduce their hidden cognitive constraints.

## CRedit authorship contribution statement

**Jianhua Ge:** Conceptualization, Methodology, Writing – Reviewing and Editing. **Joanna Li:** Conceptualization, Writing – Original Draft. **Eric Zhao:** Conceptualization, Writing – Reviewing and Editing. **Fan Yang:** Data Curation, Formal Analysis.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jbusvent.2022.106248>.

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