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ARTICLE

Working in the "Neo-Liberal Hegemony": An Investigation on Entrepreneurial Mindset of Internal Labor Market Based on Individual Differences

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ABSTRACT

Neo-liberal economy, distinguished by its emphasis on innovation and competition driven by buyer's authority, necessitates workforce to cultivate an entrepreneurial mindset (EM) for self-improvement. The aim of this study is to investigate the EM among employees in the Neo-Liberal economy. The objective is to discern the attributes associated with EM within the internal labor market, while also investigating the influence of individual variances upon these attributes. We obtained our samples by administering a set of questionnaires to a cohort of 261 individuals employed in small and medium-sized enterprises (SMEs) located within the geographic scope of China. Our investigation has probed into the facets of the EM, encompassing innovativeness, need for achievement, risk-taking, autonomy, and proactiveness. These components were subjected to rigorous scrutiny through the utilization of *t*-tests and analysis of variance techniques, with the objective of detecting noteworthy disparities among gender, age, educational

Received 2 September 2023 Accepted 22 November 2023 Published online 27 December 2023 © 2023 Zuo Wenjun, Svetlana V. Panikarova, Li Zhiyuan, Zhao Qi attainment, and salary scale in relation to these five dimensions of EM. Furthermore, we have bolstered our research findings with supplementary evidence derived from additional correlation analyses. Our study's findings reveal that age and educational levels do not manifest substantial variations in EM. However, we do observe significant distinctions in EM across varying income levels and genders. Additionally, this paper addresses the implications of our findings, delineates the limitations encountered in our study, and elucidates potential directions for future research. This paper's originality stems from its unique analysis of the interaction between neo-liberal economic policies and individual entrepreneurship in China, as seen through the perspective of its generation raised post-market transformation.

KEYWORDS

neo-liberal capitalism, entrepreneurial mindset, internal labor market, employability

Introduction

Contemporary economy relies on entrepreneurial adaptability to identify societal inefficiencies, facilitating efficient resource allocation for consumer needs (Schumpeter, 2021). This aligns with the "sovereignty of the buying public" concept from Austrian economics, motivating entrepreneurs to innovate for consumer well-being (von Mises, 1951). This shift in the economic landscape also promotes increased competition among workers, ultimately resulting in a post-employment era characterized by job instability, wage disparities (Reich, 2002), and the dominance of "neo-liberal hegemony" (McGuigan, 2014). To thrive, waged labor must adopt an "entrepreneurial self," aligning with consumer preferences (Kelly, 2006). This trend is supported by labor research on digital nomadic entrepreneurship, employee innovation, intrapreneurship, creative labor markets, and the gig economy, among others. As a result, the entrepreneurial mindset (EM), previously associated with entrepreneurs, is now seen as essential for waged labor in a neo-liberal economy (Ikonen & Nikunen, 2019).

In spite of the substantial body of research elucidating the role of EM in enhancing the employability prospects of wage laborers (Laalo et al., 2023), there remains a dearth of scholarly inquiry into the influence of demographic factors on the development of an employee's EM (Kuratko et al., 2023). Furthermore, in a neoliberal economy that emphasizes market forces and reduces government intervention, understanding how people can use their unique qualities to thrive becomes crucial (Pedro-Carañana & Armirola-Garcés, 2022). This existing gap and the focus on individual efforts underscore the necessity to explore the expression of EM from the standpoint of individual differences.

Meanwhile, we take the example of China as our research subject to provide insight on the public attitudes toward entrepreneurialism since its market transformation

in the late 1970s. After the rapid global expansion of a neo-liberal ethos after 1980 (Harvey, 2006), a range of liberal policies have come to prominence in China (Bremmer, 2010). The ascent of market-oriented reforms has extensively reshaped Chinese economic landscapes, compelling a significant transformation in China's labor markets. Particularly, the role of entrepreneurs in the history of China has shifted from non-existence in the early years to becoming a cornerstone of economic growth and innovation in the later years (Huo & Wei, 2023). Moreover, the internal labor market in China presents a unique milieu that is significantly different from Western models due to its distinct socio-cultural values, Confucius traits, and political nuances (Obschonka et al., 2019; Xu et al., 2023). Thus, this research also contributes to existing literature by providing an original analysis of how individual differences within China's workforce interact with the neo-liberal economic environment to influence EM.

Based on this rationale and the abovementioned scholarly gap, the primary aim and motivation of this study is to scrutinize the nexus between EM within the internal labor market and pertinent demographic variables, including gender, income level, educational attainment, and age. To realize this research aim, a bifurcated approach is adopted: firstly, to ascertain the presence of statistically significant disparities across distinct demographic cohorts; and secondly, in instances of discerned noteworthy disparities, to meticulously investigate the disposition of EM's distribution within the confines of the demographic groupings.

Literature Review

Entrepreneurial Mindset as a Labor Phenomenon in a Neo-Liberal Society

Neo-liberalism aligns society with liberal-capitalist principles, combining a constitutional democracy and a modest welfare state (Vallier, 2022). It has become dominant ("neo-liberal hegemony"), influencing culture and identities, with celebrities epitomizing unattainable success (McGuigan, 2014). This hegemony promotes an "entrepreneurial self" to adapt to neo-liberal challenges. Coleman (2016) describes the role of EM to overcome "new pessimism" among youth facing austerity, while Ikonen and Nikunen (2019) emphasize the importance of nurturing entrepreneurial skills for employability and economic growth. Avle et al. (2019) highlight the critical role of digital technology and computer-supported cooperative work in fostering entrepreneurialism in the modern economy. In the context of China, EM among employees is also emphasized as a crucial attribute for sustaining employability in the nation's progressively competitive job market (Shi & Sewell, 2011).

EM can be elucidated as a cognitive stance facilitating an individual in generating value through the discernment and proactive exploitation of opportunities (Daspit et al., 2023). This entails making judicious decisions despite restricted information availability, exhibiting flexibility and tenacity within environments characterized by intricacies and unpredictabilities. While investigating the literature concerning EM, Amit et al. (1995) reached the conclusion that two additional dimensions, namely emotional and behavioral aspects, have been incorporated into the conceptualization of EM. Upon careful consideration, it becomes evident that the definitions attributed to

the entrepreneurial construct bear resemblance to the ABC model of attitude proposed by Breckler (1984), which is established to comprise three distinct components known as affect, behavior, and cognition. Given that an attitude represents a persistent psychological propensity an individual possesses toward a specific object, the EM equips its adherents with a predisposition to engage in entrepreneurial behaviors.

The application of EM is not restricted solely to conventional entrepreneurs who establish startup enterprises. Presently, scholarly discourse suggests that EM could extend to encompass a prevalent disposition within the workforce, implying that individuals such as corporate innovators (Ireland et al., 2006), managerial figures (Covin & Slevin, 2017), and employees (Hwang & Shin, 2019) inclined towards organizational entrepreneurship. Academics have established a correlation between the emergence of EM and the tenets of neo-liberal enterprise (Kuratko et al., 2023), the cultivation and advancement of entrepreneurial pedagogy (Wardana et al., 2020), as well as the intricate milieu of an unpredictable and precarious labor market landscape (Ikonen, 2013). Additionally, scholarly discourse acknowledges the pivotal function of EM in furnishing wage laborers with adeptness to navigate the intricacies of an uncertain labor market terrain (Ikonen & Nikunen, 2019). Furthermore, Hu et al. (2022) conducted an in-depth study on the implementation of EM within the Chinese context. Their research revealed a significant correlation between EM of human resource professionals and their career progression, as well as their capacity for intrapreneurship within their current roles.

The Outcomes of Entrepreneurial Mindset

The existing body of research concerning the outcomes of EM can be categorized into two main levels: individual and venture. At the individual level, EM has been observed to have implications for various aspects such as individual identity renewal (Morris et al., 2012), the ability to balance conflicting objectives (Żur & Naumann, 2018), commitment escalation (McMullen & Kier, 2016), and the pivotal determination of initiating a new business endeavor (Outsios & Kittler, 2018). Turning to the venture level, EM's influence is closely linked with the strategic choices undertaken by a venture (Lombardi et al., 2021), the display of entrepreneurial leadership qualities (Shepherd et al., 2015), and ultimately, the overall performance achievements of the venture (Ireland et al., 2003). In a study focused on China, Wenjun (2023) demonstrated that fostering an EM in employees through the provision of psychological safety and engagement significantly augments their strategic renewal behavior.

In contemporary times, the linkage between EM and entrepreneurship has expanded, shifting towards recognizing its role in the internal labor market. Reibenspiess et al. (2022) emphasized that employees exhibiting entrepreneurial behavior serve as the bedrock for organizational innovation. This requisite for entrepreneurial behavior inherently underscores the need to nurture employees' EM. Moreover, research in industrial relations and strategic human resources reflects a growing necessity to empower employees to display greater proactivity and creativity in the era of the knowledge economy (Antonioli et al., 2011; Engelsberger et al., 2022).

Additionally, research endeavors like those concerning the "entrepreneurial self" strive to comprehend the commitment and preparation essential for thriving in the modern economy (Kelly, 2006). Within this framework, the entrepreneurial self assumes a crucial persona, shedding light on labor capabilities in neo-liberal capitalism (Ikonen & Nikunen, 2019). This newfound, generalized entrepreneurial capability aligns with the contemporary labor force's evolving requirements. Notably, activities such as self-improvement, technology adaptation, and overcoming exclusions demand an EM. This disposition prompts individuals to be innovative, proactive, and creative in navigating potential labor market challenges (Avle et al., 2019). A compelling illustration is evident in the freelance media labor domain, where the interplay of entrepreneurialism and activism is observable (Salamon, 2020). This synergy allows individuals to confront economic instability and technological shifts in digital media industries and media organizations.

Demographic Variables and Entrepreneurial Mindset in the Internal Labor Market Within this context, our study posits that demographic variables play a pivotal role in shaping EM among employees. Previous empirical investigations have explored the impact of individual factors such as metacognition (Haynie et al., 2010), self-efficacy (Zhang & Chun, 2018), experience (Outsios & Kittler, 2018), and dispositional factors (Ikonen & Nikunen, 2019) on the formation of EM. Viewing EM as a cognitive process, it can be situated within a framework of cognitive processes.

Theoretically, the manifestation of an employee's EM within an organizational context is intricately linked to both individual variances and the organizational milieu. This premise is evident in the connection drawn between entrepreneurial education and an individual's inclination towards venture creation (Duong, 2022). Drawing from the realm of organizational research, social identity theory offers insights into the potential mechanisms linking various demographic variables to an employee's EM. Central to social identity theory is the notion that an individual's sense of identity and affiliation with a specific group significantly influence their attitudes (Hogg, 2016). Demographic factors such as gender, wage level, and educational attainment form a fundamental aspect of an individual's personal identity. For instance, membership in a demographic group characterized by higher income might positively impact one's perception of entrepreneurial opportunities, leading to greater proactive behavior, innovation, and risk-taking propensity.

Empirical support can further validate our hypothesis. Jelenc et al. (2015) conducted a study to explore how demographic factors affect individual entrepreneurial orientation and strategic thinking ability. Their results demonstrated that particular demographic variables indeed influence entrepreneurial thought patterns. Within the entrepreneurial orientation framework, aspects such as age, gender, education abroad, and previous experience contribute to the trajectory of EM. Noteworthy is the finding that entrepreneurs aged 40–60 display a reduced propensity for risk-taking. In the context of strategic thinking, demographic elements like age, gender, education, and experience are closely tied to distinct styles of strategic thinking. For instance, their study indicates that entrepreneurs above 60 tend to exhibit higher scores in

systems thinking. In their study on the influence of household income on individual entrepreneurial orientation, Nandamuri and Gowthami (2013) established household income as a critical demographic factor affecting entrepreneurial orientation. Notably, all factors, except risk-taking, exhibited statistically significant correlations with household income, with the majority of relationships between income levels and entrepreneurial orientation components being positive. Additionally, Dubey and Sahu (2022) found in their research that demographic factors such as gender, locality of stay, and family income significantly impact the entrepreneurial intention of graduate students, whereas age and occupation do not. Consequently, we develop a research framework to refelect our hypotheses as follows (Figure 1):

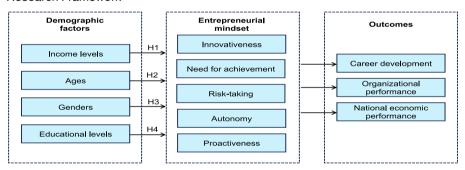
Hypothesis 1 (H1): EM varies under employees' different income levels.

Hypothesis 2 (H2): EM varies under employees' different ages.

Hypothesis 3 (H3): EM varies under employees' different genders.

Hypothesis 4 (H4): EM varies under employees' different educational levels.

Figure 1
Research Framework



Methodology

Sampling Strategy

Our sample was collected by convenience sampling through suitable channels, considering the exploratory type of the research (Gu & Chi Sen Siu, 2009) and the confidentiality policies of the HR departments of the studied companies (Albdour & Altarawneh, 2014). The study was conducted in Shanghai and Shenzhen, key economic centers in China with dynamic labor markets and numerous entrepreneurial ventures. Data was collected from January to March 2023, mainly from small to medium-sized enterprises. We invited 30 department heads to participate in our survey, receiving 278 responses after distributing it through their subordinates. To guarantee data reliability, we implemented a quality control question, eliminating 17 responses. This left us with 261 valid responses for analysis. Our choice of this sample size was influenced by response rate, research constraints, comparability to other studies, and the necessity for a robust statistical analysis. Furthermore,

Roscoe (1969) recommended a sample size between 30 and 500 as appropriate for most behavioral studies.

The demographic characteristics of our sample are described as follows: male workers accounted for 17.6% of the respondents, while 82.4% were female. The majority of our respondents (90%) fell within the age range of 18 to 30, with 9.6% belonging to 31–40 age group and 0.4% falling within 41–50 age range. In terms of education, 73.9% of the respondents had received education at the junior college or university level, while 26.1% had attained a Master's or Doctorate degree. Regarding income levels, 39.1% of respondents had incomes below 4,000 CNY (approximately 564.58 USD), 41.8% fell within the income range of 4,000 to 8,000 CNY (approximately 564.58–1,129.16 USD¹), 12.3% were within the income range of 8,000 to 12,000 CNY (approximately 1,129.16–1,693.74 USD), and 6.8% had incomes exceeding 12,000 CNY (approximately 1,693.74 USD).

Measurement

The assessment of the EM was adopted from the College Students' Entrepreneurial Mindset Scale (CS-EMS), a tool that was recently formulated and verified by Jung and Lee (2020). As per recommendations put forth by Parameswaran and Yaprak (1987), the technique of back translation was employed to safeguard the faithful and meticulous conveyance of the underlying semantic nuances of the original English scale into the Chinese adaptation. This study employed a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), which was then categorized into five sub-factors: innovativeness (I), comprising six items, need for achievement (NA), four items, risk-taking (RT), three items, autonomy (A), three items, and proactiveness (P), three items. The comprehensive compilation of survey instruments and corresponding programming code is available within the appendix section for reference (Appendix). According to the results, the Cronbach's α reliability coefficients for the sub-factors of innovativeness, need for achievement, risk-taking, autonomy, and proactiveness were .88, .83, .88, .77, and .80, respectively. Additionally, the reliability coefficient for the entire scale was reported to be .94, supporting its robustness as a measure of EM (Hair et al., 2009).

Result

Measurement Model Validation

In order to validate our hypothesis testing data, we followed the recommendations of Straub et al. (2004) regarding measurement validity, encompassing content, convergent, and discriminant validity. Convergent validity was assessed using Average Variance Extracted (AVE), as per Fornell and Larcker (1981), to measure variance from constructs versus measurement error. Composite reliability (CR) evaluated construct consistency, considering different indicator loadings (Hair et al., 2009). Cronbach's alpha gauged reliability by correlating scale items (Straub et al., 2004). For discriminant validity, we examined loadings and cross-loadings, ensuring constructs shared more

¹ According to the exchange rate at the time of the study.

variance with their measures than with others (Hair et al., 2009). Content validity was achieved by adapting constructs and items from prior literature, refined through a pilot survey, ensuring clarity and distinct articulation (Nunnally & Bernstein, 1994).

Table 1 presents the computed values for AVE, CR, and Cronbach's alpha for each construct. In accordance with the recommendations put forth by Raykov (2008), the omission of item A3 has been executed in preparation for subsequent data analysis, aiming to ensure internal reliability. The analysis reveals that the minimum CR value is .670, the lowest Cronbach's alpha value is .688, and the smallest AVE value is .504. These findings indicate elevated reliability and convergent validity across all constructs, surpassing the benchmarks suggested by scholars (Fornell & Larcker, 1981; Pallant, 2020). In Table 2, the loadings and cross-loadings from factor analysis are illustrated, with loadings (italicized values) notably surpassing cross-loadings. In line with Straub et al. (2004), this outcome underscores ample discriminant validity and convergent validity for all constructs employed in our study.

Table 1
Overview of Measurement Model

| Constructs | Items | CR | AVE | Cronbach's a |
|---------------------|-------|------|------|--------------|
| Innovativeness | 4 | .831 | .556 | .824 |
| Need of achievement | 4 | .883 | .653 | .881 |
| Risk taking | 3 | .874 | .698 | .873 |
| Autonomy | 2 | .670 | .504 | .688 |
| Proactiveness | 3 | .800 | .573 | .795 |

Note. Source: developed by authors.

Table 2 *Loadings and Cross-Loadings*

| Items | | Component | | | | | | | | | |
|-------|------|-----------|------|------|------|--|--|--|--|--|--|
| nems | 1 | 2 | 3 | 4 | 5 | | | | | | |
| l1 | .525 | .688 | .842 | .518 | .195 | | | | | | |
| 12 | .497 | .575 | .867 | .403 | .170 | | | | | | |
| 13 | .427 | .309 | .812 | .434 | .069 | | | | | | |
| 16 | .687 | .691 | .655 | .479 | .175 | | | | | | |
| NA1 | .866 | .432 | .503 | .572 | .184 | | | | | | |
| NA2 | .838 | .580 | .600 | .583 | .137 | | | | | | |
| NA3 | .846 | .547 | .491 | .533 | .200 | | | | | | |
| NA4 | .869 | .502 | .414 | .526 | .177 | | | | | | |
| RT1 | .574 | .881 | .543 | .482 | .268 | | | | | | |

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| Itama | | | Component | | |
|-------|------|------|-----------|------|------|
| Items | 1 | 2 | 3 | 4 | 5 |
| RT2 | .537 | .891 | .517 | .503 | .244 |
| RT3 | .465 | .868 | .436 | .508 | .266 |
| A1 | .094 | .281 | .106 | .108 | .870 |
| A2 | .282 | .233 | .193 | .302 | .862 |
| P1 | .583 | .596 | .575 | .815 | .258 |
| P2 | .556 | .458 | .456 | .896 | .188 |
| P3 | .603 | .564 | .461 | .782 | .172 |

Note. Extraction method: principal component analysis; Rotation method: varimax with Kaiser normalization; Source: developed by authors.

Common Method Biases

The common method variable was used to confirm that common bias was not a major issue in this study. We used Harman's one-factor test with IBM SPSS 26 for detecting possible common method biases in our research (Harman, 1976). The result revealed that the total variance extracted by a single factor is 45.901%, which is lower than the recommended threshold of 50% (Podsakoff et al., 2003). Therefore, there are no apparent issues with common method bias in this research.

Table 3
Common Method Bias Test

| Fit indices | X²/df | CFI | TLI | RMSEA | SRMR |
|------------------------|-------------------|-------|-------|-------|-------|
| Recommended value | < 3 | > .90 | > .90 | < .08 | < .08 |
| Actual value (Model 1) | 551.1/104 = 5.30 | .806 | .776 | .128 | .071 |
| Actual value (Model 2) | 200.747/94 = 2.14 | .954 | .941 | .066 | .041 |
| Actual value (Model 3) | 131.325/79 = 1.66 | .977 | .966 | .050 | .032 |

Note. Source: developed by authors. CFI—comparative fit index; TLI—Tucker–Lewis index; RMSEA—root-mean-square error of approximation; SRMR—standardized root-mean-square residual.

Additionally, in line with Zhou et al. (2007), we conducted fit index computations for three models using Mplus 8.3 software. Adhering to Harman's one-factor test rationale, Model 1 represented a method-only approach with all items loaded onto a single factor. Distinguishing Model 2 from Model 3 is the inclusion of control over the impact of an unmeasured latent method factor (Podsakoff et al., 2003): Model 2 encompassed solely trait-related loading of items, while Model 3 introduced a joint trait and method factor, extending the Model 2 setup. Table 3 presents the outcomes. Notably, Model 2 exhibited considerable improvement over Model 1, whereas the enhancement from

Model 2 to Model 3 was marginal. This implies that the primary variance is explained by the trait factor rather than the shared-method factor. Hence, the study's susceptibility to common-method bias appears unsubstantial (Williams et al., 2010).

Comparing Means

Having validated the measurement model and ensured data quality, we are poised for further data analysis for hypothesis testing. We utilized an independent samples *t*-test to compare the means of two distinct groups. This method is appropriate for our study as it evaluates if there is a significant difference in the means of two groups on a continuous dependent variable. Its simplicity and effectiveness in such comparisons are well documented (Mishra et al., 2019). For mean comparisons across multiple groups, we used a one-way ANOVA, ideal for examining the effect of a single independent variable on a continuous dependent variable in three or more groups. This choice is supported by its proven efficiency in identifying significant differences between group means (Tukey, 1949).

 Table 4

 Independent Samples t-Test Grouped by Gender

| Constructs | Gender | n | Mean | SD | Т | Sig. (2-tailed) |
|------------|--------|-----|--------|---------|-------|--------------------|
| I | Male | 46 | 5.3478 | 1.11115 | 2.604 | .010* |
| | Female | 215 | 4.9372 | 0.9386 | 2.334 | .023* |
| NA | Male | 46 | 5.1196 | 1.27991 | 0.567 | .571 |
| | Female | 215 | 5.0198 | 1.03666 | 0.495 | .622 |
| RT | Male | 46 | 4.8188 | 1.33834 | 2.446 | .015* |
| | Female | 215 | 4.3209 | 1.23418 | 2.321 | .024* |
| Α | Male | 46 | 5.4783 | 1.27348 | 3.315 | .001*** |
| | Female | 215 | 4.8535 | 1.13491 | 3.076 | .003** |
| Р | Male | 46 | 5.2754 | 1.26355 | 1.39 | .166 |
| | Female | 215 | 5.0264 | 1.06576 | 1.245 | .218 |

Note. Source: developed by authors. *p < .05; **p < .01; *** p < .001.

Table 4 presents the outcomes of an independent samples *t*-test, categorized by gender. The findings indicate noteworthy dissimilarities between males and females concerning innovativeness, risk-taking, and autonomy. However, no significant variances are discernible in terms of the need for achievement and proactiveness. Table 4 also displays the mean values of innovativeness, risk-taking, and autonomy among male workers as 5.348, 4.819, and 5.478, respectively. Correspondingly, female employees exhibit mean values of 4.937, 4.321, and 4.854 for the same attributes. This data suggests that male employees are more inclined towards an entrepreneurial mindset characterized by qualities like innovativeness, risk-taking, and autonomy.

| Table 5 | |
|---|---|
| Independent Samples t-test Grouped by Age | е |

| Construct | Age | n | Mean | SD | τ | Sig. (2-tailed) |
|-----------|-------|-----|--------|---------|--------|--------------------|
| 1 | 18–32 | 235 | 5.0979 | 0.95064 | -1.368 | .108 |
| | 31–40 | 25 | 5.3667 | 0.75615 | -1.645 | |
| NA | 18–32 | 235 | 5.0287 | 1.10190 | -0.356 | .148 |
| | 31–40 | 25 | 5.1100 | 0.90738 | -0.416 | |
| RT | 18–32 | 235 | 4.3887 | 1.27406 | -0.643 | .565 |
| | 31–40 | 25 | 4.5600 | 1.20077 | -0.674 | |
| Α | 18–32 | 235 | 5.0610 | 1.00595 | -1.221 | .981 |
| | 31–40 | 25 | 5.3200 | 1.02956 | -1.198 | |
| Р | 18–32 | 235 | 5.0227 | 1.12616 | -2.151 | .045* |
| | 31–40 | 25 | 5.5200 | 0.78811 | -2.860 | |

Note. Source: developed by authors. The age group 40–50 was disregarded due to the lack of a sufficient sample. *p < .05; **p < .01; *** p < .001.

 Table 6

 Independent Samples t-test Grouped by Education Level

| Constructs | Education | n | Mean | SD | Τ | Sig. (2-tailed) |
|------------|---------------|-----|--------|---------|--------|--------------------|
| 1 | Undergraduate | 193 | 4.9845 | 1.02337 | -0.696 | .487 |
| | Graduate | 68 | 5.0809 | 0.85458 | -0.758 | .449 |
| NA | Undergraduate | 193 | 4.9935 | 1.03878 | -1.104 | .271 |
| | Graduate | 68 | 5.1618 | 1.19371 | -1.033 | .304 |
| RT | Undergraduate | 193 | 4.4076 | 1.28187 | -0.023 | .981 |
| | Graduate | 68 | 4.4118 | 1.22457 | -0.024 | .981 |
| Α | Undergraduate | 193 | 4.9819 | 1.18186 | 0.42 | .675 |
| | Graduate | 68 | 4.9118 | 1.19058 | 0.418 | .676 |
| Р | Undergraduate | 193 | 5.0518 | 1.06484 | -0.453 | .651 |
| | Graduate | 68 | 5.1225 | 1.21749 | -0.425 | .672 |

Note. Source: developed by authors. *p < .05; *** p < .01; **** p < .001.

Table 5 displays the outcomes of an independent samples *t*-test categorized by age. The findings indicate that there are no notable variations across various aspects of EM among workers in distinct age brackets, apart from proactiveness. These results indicate that employees within the internal labor market generally exhibit an entrepreneurial mode of thinking, regardless of age disparities. Nevertheless,

employees within the age range of 31 to 40 exhibit a higher propensity for workplace proactivity when compared to their counterparts aged 18 to 30. Likewise, Table 6 presents the results of an independent samples *t*-test categorized by educational attainment. The results suggest that there are no significant differences in different dimensions of EM among employees with varying levels of education. This underscores that individuals within the internal labor pool showcase a mindset inclined towards entrepreneurship, irrespective of their educational backgrounds.

Table 7One-Way ANOVA Grouped by Income

| Items | Income | n | Mean | SD | F | Sig. (2-tailed) | Multi- comparisons |
|-------|------------|-----|-------|-------|-------|--------------------|-----------------------|
| I | 4000 | 102 | 4.766 | 1.026 | 4.699 | 0.003** | <u>1</u> – <u>4</u> * |
| | 4000-8000 | 109 | 5.094 | 0.978 | | | |
| | 8000-12000 | 32 | 5.211 | 0.793 | | | |
| | 12000 | 18 | 5.528 | 0.707 | | | |
| NA | 4000 | 102 | 4.777 | 1.219 | 3.89 | 0.01* | <u>1</u> – <u>4</u> * |
| | 4000-8000 | 109 | 5.154 | 0.951 | | | |
| | 8000-12000 | 32 | 5.211 | 1.002 | | | |
| | 12000 | 18 | 5.500 | 0.836 | | | |
| RT | 4000 | 102 | 4.160 | 1.292 | 2.877 | 0.037* | - |
| | 4000-8000 | 109 | 4.474 | 1.260 | | | |
| | 8000-12000 | 32 | 4.740 | 1.050 | | | |
| | 12000 | 18 | 4.833 | 1.290 | | | |
| Α | 4000 | 102 | 4.887 | 1.115 | 0.258 | 0.855 | = |
| | 4000-8000 | 109 | 5.005 | 1.222 | | | |
| | 8000-12000 | 32 | 5.063 | 1.134 | | | |
| | 12000 | 18 | 4.972 | 1.450 | | | |
| Р | 4000 | 102 | 4.801 | 1.220 | 4.073 | 0.008** | <u>1</u> – <u>4</u> * |
| | 4000-8000 | 109 | 5.180 | 1.017 | | | |
| | 8000-12000 | 32 | 5.281 | 0.947 | | | |
| | 12000 | 18 | 5.556 | 0.870 | | | |

Note. Significant level: * p < 0.05; ** p < 0.01; *** p < 0.001; $\overline{1} - \overline{4}$ *: The mean difference between Group 1 (4,000 CNY and below) and Group 4 (12,000 CNY and above) is significant at the p < 0.05 level; Multi-comparisons: This analysis is conducted by grouping the sample according to income levels (1 represents 4,000 CNY and below, 2 represents 4,000-8,000 CNY, 3 represents 8,000-12,000 CNY, and 4 represents 12,000 CNY and above); Source: Developed by Authors.

Table 7 displays the outcomes of a one-way ANOVA categorized by wage tiers. The findings indicate notable variations among employees across distinct wage levels concerning all dimensions of the EM, except for autonomy. Generally, employees with

elevated wage levels exhibited superior scores on our research scale compared to those with lower incomes. Supplementary insights into the differences are attainable from the post-hoc testing results, which present outcomes from multiple comparisons. These outcomes reveal that employees earning below 4,000 CNY had means of 4.765, 4.777, and 4.801 for innovativeness, need for achievement, and proactiveness, respectively. Conversely, employees earning above 12,000 CNY had means of 5.528, 5.500, and 5.556 for the same dimensions. This implies that individuals possessing entrepreneurial traits like innovativeness, the need for achievement, risk-taking, and proactiveness generally receive higher wages.

Supplementary Analyses

Our aim was to enhance and substantiate our findings through supplementary analyses. To achieve this objective, we conducted additional correlation analyses. The descriptive statistics and correlations between all constructs are presented in Table 8. Moreover, two primary conclusions can be drawn from the gathered data. Firstly, gender exhibits significant correlations with most components of the EM, including innovativeness, risk-taking, and autonomy. This outcome reinforces the results from the preceding independent samples *t*-test categorized by gender, underscoring the distinctions in characteristics between different genders. Secondly, income displays significant correlations with all EM constructs except autonomy, highlighting income as a crucial indicator of EM. On the other hand, age and education demonstrate no significant correlations with EM constructs. Consequently, it can be inferred that variations in EM based on age and education are likely to be minimal. In summary, our supplementary analyses serve to further enhance and validate the outcomes of our hypothesis testing.

Table 8
Descriptive Statistics, Correlations Between Constructs

| Variables | Mean | SD | Gender | Age | Edu | Income | ı | NA | RT | Α | Р |
|-----------|------|------|-------------------|-------------------|-------------------|--------|-------|-------|-------|-------|---|
| Gender | 1.82 | 0.38 | 1 | | | | | | | | |
| Age | 1.10 | 0.32 | 23** | 1 | | | | | | | |
| Edu | 2.26 | 0.44 | 02 | .19** | 1 | | | | | | |
| Income | 1.87 | 0.88 | 30** | .49 ^{**} | .31 ^{**} | 1 | | | | | |
| I | 5.01 | 0.98 | 16 ^{**} | .11 | .04 | .22** | 1 | | | | |
| NA | 5.04 | 1.08 | 04 | .03 | .07 | .20** | .66** | 1 | | | |
| RT | 4.41 | 1.26 | −.15 [*] | .05 | .00 | .18** | .67** | .60** | 1 | | |
| Α | 4.96 | 1.18 | 20 ^{**} | .06 | 03 | .04 | .21** | .21** | .30** | 1 | |
| Р | 5.07 | 1.10 | 09 | .12 [*] | .03 | .21** | .64** | .69** | .63** | .25** | 1 |

Note. Source: developed by authors. * p < .005; ** p < .01; *** p < .001.

Discussion

This study identified two demographic variables (gender and income level) that will significantly influence an employee's EM. Specifically, the strength of EM is stronger among male employees or employees with a higher income level. However, we cannot find a significant mean difference among the dimensions of "autonomy" under different income levels. This might mean that individual autonomy is not a primary driver for potential labor force members who choose a job as employed workers, and this is different from self-employed workers and entrepreneurs. This finding is in line with the results of research conducted by Nikolova et al. (2023), who concluded that being our boss and bossing others provide more work autonomy than working for an employer. Generally, scholars hold that the self-employed enjoy a higher level of work autonomy and control compared to employees (Nikolova et al., 2023; Stephan, 2018).

Our findings demonstrate that individuals with higher income levels often exhibit a heightened inclination toward embracing an EM. From an economic standpoint, those with greater income enjoy enhanced financial resources, affording them a safety net that mitigates the perceived risks associated with entrepreneurial pursuits. Monsen et al. (2010) corroborated this nexus between profit-sharing and employee engagement in nascent ventures by considering moderating factors such as risk and exertion. In a parallel vein, Douglas and Fitzsimmons (2013) arrived at a similar conclusion, positing that a more favorable attitude toward income correlates with stronger entrepreneurial intentions. Specifically, they substantiate the favorable associations between income and entrepreneurial intentions through the lens of "basic economic theory," contending that the cultivation of entrepreneurial intentions serves as a means for individuals to attain higher income levels in pursuit of fulfilling their heightened desire for goods and services. This alignment with the foundational tenets of economic theory underscores the notion that individuals are driven by the maximization of their financial utility.

In our research, we have discovered that male employees tend to display an EM more often in the workplace, especially in areas such as risk-taking, autonomy, and innovativeness. This finding is consistent with prior research (Lim & Envick, 2013). However, it is important to recognize that societal gender role expectations and potential cultural influences play a significant role in understanding the gender disparities related to EM. Firstly, gender schema theory (GST) posits that individuals conform to gender roles dictated by their sociocultural environment (Bem, 1981). In Confucian culture, enduring traditional roles favoring masculinity may hinder or highlight women's entrepreneurial engagement (Xu et al., 2023). Secondly, regarding risk-taking, control behavior may elucidate gender differences (Kepler & Shane, 2007). Envick and Langford (1998) found that female entrepreneurs exhibit control behavior more frequently. This preference for control may lead female entrepreneurs to opt for less risky ventures (Kepler & Shane, 2007). Thirdly, autonomy differences were previously explained by male entrepreneurs' greater confidence in their abilities (Kepler & Shane, 2007). Females may seek support from spouses, family, friends, and colleagues, influenced by social expectations on gender roles per GST. Lastly, gender differences in innovativeness, as noted by Lim and Envick (2013), only suggest that

female entrepreneurs are not averse but may lack the resources expected by social norms. Thus, factors resulting from social expectations, like educational background, career opportunities, and societal expectations, could potentially play roles in understanding gender differences in innovativeness.

Employees aged 31 to 40 are more likely to demonstrate proactive behavior in the workplace compared to those aged 18 to 30. This could be due to factors such as greater experience, maturity, career responsibilities, and commitment. However, our research results show that age cohorts and educational level do not significantly impact most of the components of employees' EM. Three perspectives may possibly explain these results. Firstly, while prior research has yielded similar results (Dubey & Sahu, 2022), the absence of significant age group differences in our study may be attributed to our sample composition. Specifically, 90% of our respondents fall within the 18-30 age group, which primarily represents the native generation of the neo-liberal economy. Consequently, caution is advised when extending this conclusion to other generations that were born and lived before China's market reform. Secondly, potential qualities of entrepreneurial thinking can be nurtured and developed regardless of age and educational level. Furthermore, an individual's EM can be influenced by various other factors, such as personal experiences (Jackson et al., 2023), exposure to entrepreneurial role models (Holienka et al., 2013), and the surrounding organizational culture (Shepherd et al., 2010). Our results implicate that age or educational level alone cannot significantly impact an individual's EM compared to the above-mentioned factors. Besides, EM may serve more pragmatic purposes in a way that provides work benefits for certain groups of people regardless of age and educational level (McVea & Dew, 2022).

Cultural and contextual factors may also play a significant role in understanding these findings, especially when comparing China with other regions. Confucian values, emphasizing tradition, renging, face, discipline, and harmony, likely contribute to a consistent entrepreneurial mindset in China across different age groups. Studies like Obschonka et al. (2019) suggest that regions in China with reduced emphasis on these values tend to have a more active entrepreneurial culture. China's local entrepreneurial landscape is closely tied to economic growth and the relaxation of policies on private businesses since the late 1970s (Li et al., 2012). This economic liberalization, along with rapid growth, has created entrepreneurial opportunities that are less dependent on formal education. Disparities in EM based on income levels reflect economic inequality in China, where higher incomes provide better resources for entrepreneurship (Sahasranamam & Sud, 2016). Gender imbalances in entrepreneurship may result from traditional societal roles favoring masculinity in Confucian culture, impacting women's entrepreneurial engagement (Xu et al., 2023). In contrast, developed countries often show a stronger link between educational attainment and EM due to the emphasis on entrepreneurial skill development in their education systems (Echtner, 1995). However, high income levels in Western contexts also facilitate greater entrepreneurial activity due to improved resource access (Panda & Dash, 2014). While social welfare systems may reduce the necessity for survival-driven entrepreneurship (Cowling & Bygrave, 2006), gender disparities persist universally, albeit with varying degrees and manifestations.

Conclusion

In the context of a neo-liberal economy marked by innovation and buyer-driven competition, employment norms have evolved. Success in this environment requires the cultivation of EM, involving proactive identification and pursuit of opportunities. This research focuses on understanding EM within China's native generation experiencing market reform and neo-liberal transformation, particularly within the internal labor market. It highlights that age and educational levels have a limited impact on EM. However, significant disparities emerge based on income levels and gender, with high-income earners and men displaying a stronger tendency towards EM. Furthermore, among employees belonging to China's native generation of market reform and globalization, those aged 31–40 exhibit greater proactivity compared to the 20–30 age group.

Research Implications

This study on the EM of employees across different demographics offers insights for both academia and practice. Academically, it fills gaps in existing research by examining demographic characteristics, moving beyond the traditional focus on entrepreneurs (Jelenc et al., 2015). This shift is timely, considering evolving labor relations and the rise of knowledge work (Lazzarato, 1996). Furthermore, these results provide insights into understanding the emergence of EM among China's native generation in the context of market reform and neo-liberal transformation. Practically, the study informs social and managerial strategies. It highlights gender differences in EM, aiding in the development of policies for gender equality and women's economic empowerment (Ikonen, 2013). For management, the findings suggest promoting gender diversity and entrepreneurial skills in the workplace. The study also suggests linking EM with rewards to boost innovation and competitiveness. Overall, it emphasizes the value of diversity in fostering team innovation and entrepreneurial capabilities.

Limitations and Future Research

This study detailed demographic variations in workplace EM, but it is crucial to recognize its limitations and propose research designs for future studies. This study utilized convenience sampling to gather data, a data collection method in the social sciences known for its efficiency and cost-effectiveness. However, this method's susceptibility to bias, especially from under-represented subgroups, suggests the need for future research to incorporate diverse sampling techniques like purposive and random sampling for robustness. Furthermore, the predominance of participants aged 20–30 years warrants careful consideration of age-related influences on EM, given their upbringing during China's market reforms. Future investigations should consider a wider age range to offer a more comprehensive analysis of entrepreneurial perceptions across different generations shaped by China's economic evolution. Data was gathered using self-report scales, where employees self-assessed their thoughts after reading the scales. Although self-reports can yield a subjective measure of internal states, other methods like peer-rating scales offer different insights by

allowing managers to evaluate employees' EM, providing an external perspective on key study variables. The study suggests that employees' EM varies by gender and income and offers existing theories and explanations for it. However, future research should empirically explore the roots of these differences.

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Appendix Constructs, Items, and Its Code

| Constructs | Items | Code |
|-------------------------|---|------|
| Innovativeness | I like to take on a new challenge. | l1 |
| | I try to work in a novel way. | 12 |
| | I am likely to accept new ideas. | 13 |
| | I persistently try to come up with outstanding ideas. | 14 |
| Need for Achievement | I act aggressively to achieve a goal. | NA1 |
| | I am more passionate than others. | NA2 |
| | I have a strong will to achieve something. | NA3 |
| | I persist in pushing forward necessary things against all odds. | NA4 |
| Risk-taking | I tend to push forward something with high expected value even with high risk. | RT1 |
| | I tend to take risks for new opportunities. | RT2 |
| | I tend to take challenges even when there is a risk of failure. | RT3 |
| Autonomy | I am reluctant to receive outside aid. | A1 |
| | I prefer solving problems independently. | A2 |
| | I prefer acting based on my own decision. | А3 |
| Proactiveness | I proactively plan new things. | P1 |
| | I plan and act in advance rather than waiting for something to be given. | P2 |
| | I tend to actively overcome hardships rather than attributing to the environment. | P3 |