Can Social Capital and Psychological Capital Improve the Entrepreneurial Performance of the New Generation of Migrant Workers in China?

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Abstract: The new generation of migrant workers may play a crucial role in boosting China’s rural economy. With the rise of knowledge economy and the advent of the information age, it is difficult for human capital and economic capital alone to gain advantages in entrepreneurship. Thus, the study of social capital and psychological capital becomes more prominent. Within this context, this paper explores the relationships among entrepreneurs’ psychological capital, social capital, and entrepreneurial outcomes for the new generation of migrant workers in the Shaanxi province. This study uses a quantitative research approach. Primary data were collected from 525 rural households in the Shaanxi province. A structural equation model is used to verify the association between social capital, psychological capital, and entrepreneurial performance. The psychological capital of the new generation of migrant workers is found to exert a more significant impact on their entrepreneurial opportunity recognition and entrepreneurial environment perception than social capital. Both entrepreneurial opportunity recognition and entrepreneurial environment perception of the new generation of migrant workers are conducive to the improvement of entrepreneurial performance. Nevertheless, the intermediary role of entrepreneurial opportunity recognition is more prominent than entrepreneurial environment perception.

Keywords: social capital; psychological capital; entrepreneurial outcomes; new generation of migrant workers; China

1. Introduction

According to the research findings on the China segment of the Global Entrepreneurship Monitor 2016/2017 (GEM 2016/2017), the quality of China’s entrepreneurial activities has been improving. Visible improvement can be seen in financial support and government policies, as well as social and cultural norms [1]. China’s entrepreneurial activity is active in both the global efficiency-driven and innovation-driven economies. In 2014, China’s entrepreneurial activity index (15.53) was higher than that of developed countries such as the USA (13.81), the UK (10.66), Germany (5.27), and Japan (3.83), among which female entrepreneurs (14.18, 21st) were more active than male entrepreneurs (16.83, 22nd). However, the index of “new products adopting new technologies” (25.63, 50th) and development of “new markets” (24.6, 69th) in entrepreneurship are much lower than those in developed countries [2]. Compared with other innovation-driven economies, China’s business environment is in bad need of improvement. The slow or stagnating development remains in education and training, business environments and research and development transfer [1].
In terms of entrepreneurial environment, migrant entrepreneurs in developed countries are provided with a more comprehensive supporting system, including education, financial support, security, and psychological counselling mechanisms, than China migrant entrepreneurs. China’s traditional migrant workers are characterized for having a lower educational level, and their entrepreneurship mainly stays within family-oriented activities. Entrepreneurial financial support mainly relies on loans from government and state-owned banks, so their entrepreneurial performance has been relatively low [1].

The new generation of migrant workers refers to those who were born in the 1980s, but do not engage in agricultural activities in rural areas. The majority of them are more educated than traditional migrant workers and they are more inclined to choose jobs that require nonmanual work in the service sector of tertiary industry. They are characterized for having a clear plan for their future careers, being risk takers, creative, and having tremendous willingness to try different things. They pay particular attention to the satisfaction of spiritual needs [3,4].

The new generation of migrant workers accounts for more than 70% of migrant workers nationwide [5]. Under the background of new urbanization, the new generation of migrant workers has become an increasingly important part of China’s modern industry [6]. From 2012 to 2015, the annual growth rate of migrant workers returning home to start businesses was more than 10%, and, by 2017, the number of returning entrepreneurs nationwide had reached 7 million [7]. The trend of migrant workers returning home to start their own businesses has been accelerating rapidly. It has been found that the majority of those migrant workers who returned home in 2017 were born after 1980 and they now have become the main entrepreneurial body. Moreover, those migrant workers who returned home to start a business accounted for 10.9 percent [8]. This new social phenomenon has been recognized and supported by a government that aims at stimulating sustainable business growth in rural areas. In 2017, several policies were developed to support start-up companies and migrant entrepreneurs. By supporting rural innovation and entrepreneurship, the government is trying to tackle the well-known problem of “rural emptiness”. New start-ups developed by the new generation of migrant workers will help to stop people’s migration from rural to urban areas [9]. The new start-ups will also help to provide equal opportunities in rural areas.

Research indicates that self-employment and entrepreneurship are seen as a way of increasing job productivity [10]. There is an interaction among social capital, psychological capital, and entrepreneurial success [11]. These results have also been corroborated in a farming environment in China [11,12]. Some authors have alleged that psychological capital contributes more to the development of competitive advantage than labor and social capital [13–15]. Psychological capital and social capital have proved to play a major role for those migrant entrepreneurs engaged in the creation of new business ventures [16,17]. For migrant entrepreneurs to fulfil their potential, the government needs to provide the right infrastructure and stimulus [18]. Existing researchers have looked at the importance of social capital and psychological capital in entrepreneurship [19]. However, most of these studies have looked at the impact of each variable separately [20]. There is a pressing need for research to explain the influence of both variables and how they affect the entrepreneurial outcomes of migrant workers starting new business ventures in rural areas in China [21]. This research will partly address this gap in knowledge by gaining a deeper understanding of the impact of social and psychological capital on the entrepreneurial performance of the new generation of migrant workers in the Shannxi Province. Two intermediary variables—entrepreneurial opportunity identification and entrepreneurial environment perception—were selected to understand the entrepreneurial behavior of migrant workers in rural areas. Therefore, this paper looks at the impact of social capital and psychological capital on the entrepreneurial performance of the new generation of migrant workers, as well as the intermediary role of entrepreneurial opportunity recognition and entrepreneurial environment perception from a new perspective of social capital and psychological capital.

The next section is focused on the theoretical analysis and hypotheses proposal, followed by the introduction and justification of data collection, survey sampling, and measurement of related
variables. Furthermore, based on the data collected from 525 rural households in the Shaanxi province, the paper verifies the impact path and degree of the variables using a structural equation model.

2. Theory and Hypothesis

2.1. Social Capital and Entrepreneurial Performance of the New Generation of Migrant Workers

Bourdieu (1983) was a pioneer in the field of social capital [22]. He alleged that social capital is closely related to social networks. Several authors have conducted studies around the value of social capital and have offered similar interpretations to Pierre’s suggestions [23–25]. The entrepreneurial performance of the new generation of migrant workers is the final result of the new generation of migrant workers in various ways, such as large-scale breeding, starting companies or enterprises, and establishing cooperatives [26].

Scholars looked at the impact of social capital from different angles. Johannsson (1990) and Hu (2009) highlighted the value of social communication in identifying entrepreneurial opportunities [27,28]. Hills et al. (1997) and Yang (2012) indicate that social networks and relationships have an important effect on business start-ups [29,30]. The outcomes of these studies were confirmed by a more recent study conducted by Jiang (2014) [31]. Research conducted by Elfring and Hulsink (2003) indicates that people between 25 and 44 are more likely to start a business because of the access to capital and experience [32]. Farmers’ lack of access to capital, information, and education have limited their ability to identify entrepreneurial opportunities [26,33–36]. The social capital of potential entrepreneurs, such as their relatives and friends, the number of their relatives serving as village cadres or civil servants, the number of friends they keep close contact, and the long-term entrepreneurial environment in rural areas have a significant impact on the entrepreneurial performance of the new generation of migrant workers [37]. The quantity of strong links in terms of the entrepreneurial network of the new generation of migrant workers positively affects start-up performance. The same applies to the entrepreneur’s acquaintance level, the network strength, the contact frequency between the entrepreneur and the network members, and the extent of trust/support between the organization members, all of which have a significant positive influence on the organizational entrepreneurial performance [34].

2.2. Psychological Capital and Entrepreneurial Performance of the New Generation of Migrant Workers

Psychological capital is a relatively new concept, which is often defined as the core psychological aspects of an individual’s general enthusiasm [38]. Avolio (2005) argues that a positive psychological state includes hope, optimism, self-efficacy, and resilience [39]. Practically, it means a positive attitude toward future challenges, confidence, and perseverance. The study of Luthans et al. (2004 shows that psychological capital enhances an organization’s profitability and performance [40]. Other scholars have corroborated the value of psychological capital in predicting an organization’s performance and innovation capability [41,42]. Individuals with psychological traits such as overconfidence, need for achievement and autonomy, self-efficacy, and internal locus of control have more capacity to take risks and be successful in self-employment [43]. Kihlstrom and Laffont (1979) abandon the homogeneity assumption regarding the attitude toward risk and conclude that the probability of entry into self-employment is greater for individuals with lower levels of risk aversion [44]. The most studied personality traits include overconfidence [45], self-efficacy [46], internal locus of control [47], assertiveness [48,49], narcissism [50], and taste for variety [51]. All of these may also influence the entry into self-employment [52]. Research has also found a positive correlation between self-efficacy and entrepreneurial intentions of the new generation of migrant workers in China [53]. Within the new generation of migrant workers, those with positive psychological capital are more likely to make better and confident business decisions [54]. By reflecting on their actions continuously, they can improve the chances of developing a successful new business [55].
2.3. Intermediary Role of Entrepreneurial Opportunity Identification

Entrepreneurial opportunity identification is the judgment made by business starters on whether an entrepreneurial opportunity exists, identifying not only what influences emergence, but also how [56]. Successful entrepreneurs need to find an entrepreneurial opportunity, evaluate, and develop it.

There are many sources of entrepreneurial opportunity identification, such as disruptive innovation, changes in the external environment, process changes, changes in the industry structure, etc. [57]. There are three ways of recognizing entrepreneurial opportunity: Active search, passive search, and fortuitous discovery [58,59]. People’s ability to identify an entrepreneurial opportunity will be affected by their perception ability, access to information, and entrepreneurial alertness [60,61]. Some scholars have looked at the three stages of the opportunity identification process. This starts with the entrepreneur perception of reality, followed by an assessment of a potential opportunity, as well as access to resources [62]. It cannot be ignored that motivation plays a significant role on the entrepreneurial performance of the new generation of migrant workers [63,64]. Entrepreneurial opportunity identification plays an intermediary role between social capital, human capital, and entrepreneurial performance [65]. Meanwhile, entrepreneurship opportunity identification plays a complete intermediary role between psychological capital and entrepreneurial performance [66].

**Hypothesis 1.** The new generation migrant workers’ entrepreneurial opportunity identification has a significant positive impact on entrepreneurial performance, and the entrepreneurial opportunity identification plays an intermediary role between social capital, psychological capital, and entrepreneurial performance.

2.4. Intermediary Role of Entrepreneurial Environment Perception

Entrepreneurial environment perception refers to the positive or negative subjective feelings of entrepreneurs about their entrepreneurial environment, including government policy environment, social and economic environment, and entrepreneurial culture environment [67]. Wei (2014) points out that the entrepreneurial environment is an important factor affecting the performance of farmer start-ups. The financing environment, market environment, transportation environment, cultural environment, and technological environment in the entrepreneurial environment are positively correlated with the growth performance of farmer start-ups. Market environment, technical environment, and traffic environment are positively correlated with the financial performance of farmer start-ups [68]. There is plenty of research suggesting that there is a positive correlation between the entrepreneurial environment and entrepreneurial activity. This also applies to the number of farming start-ups in China [69,70]. Research conducted by Zhang (2015) indicates that business atmosphere, access to finance, tax policy, and vocational training policy affect the business intention of farmers who lost their land [70]. Another study arrived to similar conclusions, but suggested that external factors also have a significant effect on entrepreneurial performance [71]. Among external factors, government policy and government service quality could have a profound impact on the new generation of migrant workers’ entrepreneurial willingness and entrepreneurial performance [72,73]. Most studies found positive effects of self-employment policies on employment status and personal income of former unemployed workers [74]. Infrastructure development to promote local economic development has stimulated farmers’ entrepreneurial behavior [75]. However, in some parts of China, the existing infrastructure is preventing potential entrepreneurs from achieving their full potential [76]. Yang’s (2011) results are in line with previous research, but he adds the family environment component as an important factor of the environment affecting entrepreneurship performance [77,78]. Social capital can help entrepreneurs to access relevant resources [79]. For example, strong social skills play a significant role in promoting their access to government policy support [80]. Entrepreneurs with high psychological capital can quickly perceive and absorb information from the external environment [81]. Entrepreneurs with a high level of cognitive monitoring are more sensitive to environmental changes...
and can find opportunities in the environment in a timely manner, bringing more profit possibilities to their businesses [82].

Hypothesis 2. The new generation migrant workers’ entrepreneurial environment perception has a significant positive impact on entrepreneurial performance, and the entrepreneurial opportunity identification plays an intermediary role between social capital, psychological capital, and entrepreneurial performance.

3. Methods

3.1. Sampling and Data Collection

The data were collected through a survey, which was conducted in November and December 2015 and again during July and August 2017. A pilot test was held in Yuzhong County; Yongdeng County; and Yangling District of the Shaanxi Province to improve the survey. Training was provided to data collectors. The questionnaire consists of six parts, covering the basic situation of the start-up of the new generation of migrant workers, the social capital of the new generation of migrant workers, the psychological capital of the new generation of migrant workers, the opportunity recognition of the new generation of migrant workers, the entrepreneurial environment perception of the new generation of migrant workers, and the entrepreneurial performance of the new generation of migrant workers.

Ankang, Tongchuan, and Weinan were selected as the target cities for this study, due to the level of entrepreneurial activity. A random sampling method was adopted, with 1–3 districts (counties) in each city, 3–5 townships (towns) in each district (county), and 1–2 villages (streets) in each township (town). A total of 3 cities, 5 districts (counties), and 10 townships (towns) in the Shaanxi province were surveyed. The survey was administered to 571 new generation migrant workers who have already started their own businesses. Out of the 571 respondents, 525 were considered valid. The response rate of the questionnaires was 91.94%. Table 1 below shows the distribution where the questionnaire was carried out.

<table>
<thead>
<tr>
<th>City</th>
<th>District/County</th>
<th>County/town</th>
<th>Number of Samples</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ankang City</td>
<td>Shiquan County</td>
<td>Chihe Town</td>
<td>125</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Raofeng Town</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yinlong County</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Tongchuan City</td>
<td>Wangyi District</td>
<td>Wangyi Country</td>
<td>42</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Huangbao Town</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Weinan City</td>
<td>Fuping County</td>
<td>Dancun Town</td>
<td>47</td>
<td>266</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xiaji Town</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Linwei District</td>
<td>Chongning Town</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xinshi Town</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Economic Development District</td>
<td></td>
<td>Fengyuan Town</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>571</td>
</tr>
</tbody>
</table>

Among those 525 valid participants, 262 were men and 263 were women. Their age ranged from 16 to 39, with 91.6% married. Most participants had attained low levels of education (69.6%) but were experienced workers. This reflects the characteristics of the new generation of migrant workers.
3.2. Measures

Social capital and psychological capital of the new generation of migrant workers. Informed by the research findings of Guo (2013) [83] and Luthans (2004, 2007) [38,40], the paper measured social capital and psychological capital of the new generation of migrant workers using a five point Likert scale [84]. The options given in the Likert scale ranged from 1 (never) to 5 (always). The following questions helped to measure social capital: “Do you have many close relatives?”, “Is your business supported by most of your friends?”, “Is it easy to get help for your business from your relatives and friends?”, “Are residents of your village/neighborhood close to each other?”, and “Are you close to your potential or existing business partners?”, etc. Similarly, the following questions are in place to measure psychological capital: “Are you brave and adventurous enough to achieve success?”, “Are you able to keep optimistic no matter what happens?”, “Do you have enough courage to explore the business world?”, and “Is your business making you more confident?”, etc.

Entrepreneurial performance of new generation of migrant workers. Research findings from Huang (2010) [34] and Zhu (2013) [62] informed the questionnaire to collect the relevant information to measure the entrepreneurial performance of the new generation of migrant workers. Questions asked in the survey include: “Is your business running smoothly?”, “Have you realized your goal set before you starting the business?”, “Have you summarized or put forward any new skill?”, “Is your new skill appreciated by others?”, “Did your business drive your family and friends into jobs and business?”, and “Do you think that you made contributions to the society through your business?”, etc.

Entrepreneurial opportunity identification. Zhang’s paper (2013) [69] informed the development of the 4 questions used to measure the level of entrepreneurial opportunity identification of new generation of migrant workers. The questions used in the survey were: “Can you find business opportunities earlier than others?”, “Can you get enough resources from others?”, “Are you clear with where your business is heading to?”, and “Are you ready to burden the failure of your business?”

Entrepreneurial environment perception. Research findings from several scholars [68,70,85] informed the questions to measure entrepreneurial environment perception. Some of these questions are: “Do local government officials show high efficiency in their work?”, “Are creating and innovation appreciated in local culture?”, “Is it easy to get loans?”, and “Are respect and attention paid to successful local business starters?”

4. Results and Discussion

4.1. Model Building

This research discusses the relationship among several variables. As these variables are difficult to measure and subjective measurement may cause large errors, this paper chose the structural equation model for empirical analysis. This is a metrological model that incorporates factor analysis and path analysis. It was selected because it allows measuring variables and analyzing relationships between them. The structural equation model is as follows:

\[ \eta = B\eta + \Gamma \xi + \zeta \]  
\[ X = \Lambda_X \eta + \delta \]  
\[ Y = \Lambda_Y \eta + \epsilon \]

The structural equation includes two theoretical models: Equation (1) is the structural model. Its function is to describe the relationship between potential independent variables (social capital, psychological capital, entrepreneurial opportunity identification, and entrepreneurial environment perception of new generation of migrant workers) and potential dependent variables (entrepreneurial performance of new generation of migrant workers); Equations (2) and (3) are measurement models. Their function is to define the linear relationship between potential variables and observed variables.
Equation (2) is the measurement model of independent variables and Equation (3) is that of dependent
variables. ξ represents potential independent variable and η represents potential dependent variable; Λ_x is the relationship matrix between potential independent variables and their observed variables
and it consists of factor loading of X on ξ. Λ_y is the relationship matrix between potential dependent
variables and their observed variables and it consists of factor loading of Y on η; δ and ε are the errors
of the equation. B, the coefficient matrix of potential dependent variables, describes the relationship
between them; Γ, the coefficient matrix of potential independent variables, describes ξ’s effect on η; ζ
is the error of the structural model.

4.2. Test on Structural Model

In order to ensure the credibility of findings, a test on reliability and validity of the scale is
presented in Table 2.

Table 2. Test on reliability and validity of the scale.

<table>
<thead>
<tr>
<th>Scale</th>
<th>αReliability Index</th>
<th>KMO Value</th>
<th>Bartlett Spherical Test Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social capital</td>
<td>0.899</td>
<td>0.847</td>
<td>0.000</td>
</tr>
<tr>
<td>Psychological capital</td>
<td>0.908</td>
<td>0.912</td>
<td>0.000</td>
</tr>
<tr>
<td>Entrepreneurial performance</td>
<td>0.912</td>
<td>0.890</td>
<td>0.000</td>
</tr>
</tbody>
</table>
| Entrepreneurial opportunity
identification | 0.776             | 0.759     | 0.000                       |
| Entrepreneurial environment
perception                          | 0.914             | 0.886     | 0.000                       |
| Total                              | 0.955             | 0.915     | 0.000                       |

The reliability test shows that the Cronbach’s Alpha indexes of all potential variables are above
0.7, ranging from 0.776 to 0.955, which means the questionnaire shows high coherence. The validity
test shows that the Kaiser Meyer Olkin (KMO) values of all variables are between 0.759 and 0.915.
Their Bartlett values are all 0.000, indicating that the data are suitable for factor analysis. To evaluate
the model fit, a test was conducted on a series of fit indexes, for example, absolute index, relative index
and simple index.

The results shown in Table 3 suggest that the model is appropriate for this type of study.

Table 3. Test on Structural Model.

<table>
<thead>
<tr>
<th>Fitness</th>
<th>Fitness Index</th>
<th>Judging Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Index</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMIN/DF = 4.477</td>
<td></td>
<td>Acceptable between 1–5</td>
</tr>
<tr>
<td>GFI = 0.866</td>
<td></td>
<td>0.5 &lt; GFI &lt; 1, better to be close to 1</td>
</tr>
<tr>
<td>RMR = 0.041</td>
<td></td>
<td>RMR &lt; 0.05, better to be close to 0</td>
</tr>
<tr>
<td>AGFI = 0.832</td>
<td></td>
<td>0.5 &lt; AGFI &lt; 1, better to be close to 1</td>
</tr>
<tr>
<td>Relative Index</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFI = 0.813</td>
<td></td>
<td>0.5 &lt; NFI &lt; 1, better to be close to 1</td>
</tr>
<tr>
<td>RFI = 0.786</td>
<td></td>
<td>0.5 &lt; RFI &lt; 1, better to be close to 1</td>
</tr>
<tr>
<td>IFI = 0.848</td>
<td></td>
<td>0.5 &lt; IFI &lt; 1, better to be close to 1</td>
</tr>
<tr>
<td>CFI = 0.847</td>
<td></td>
<td>0.5 &lt; CFI &lt; 1, better to be close to 1</td>
</tr>
<tr>
<td>Simple Index</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNFI = 0.711</td>
<td></td>
<td>0.5 &lt; PNFI &lt; 1, better to be close to 1</td>
</tr>
<tr>
<td>PCFI = 0.741</td>
<td></td>
<td>0.5 &lt; PCFI &lt; 1, better to be close to 1</td>
</tr>
</tbody>
</table>

4.3. Analysis on Structural Equation Model

Factor analysis was selected as the appropriate tool to reduce data around the social and
psychological capital of the respondents targeted in this research. Five factors, namely social prestige,
social network, social participation, social support, and social trust, are selected from social capital.
Three factors, namely entrepreneurial happiness, self-efficacy, and innovation and risk-taking, are
selected from psychological capital. Six factors, namely financial and credit policies, entrepreneurial
culture, government administrative support, government service support, economic development, and
infrastructure construction, are selected from entrepreneurial environment perception. Four factors,
namely financial performance, customer performance, learning and growth performance, and internal business process performance, are selected from entrepreneurial performance.

The effect of social capital and psychological capital of the new generation of migrant workers on entrepreneurial opportunity identification and entrepreneurial environment perception, as well as that of the entrepreneurial opportunity identification and entrepreneurial environment perception on entrepreneurial performance, is shown in Figure 1. The observed variables of social capital are: Social prestige (SC.1), social participation (SC.2), social network (SC.3), social trust (SC.4), and social support (SC.5). The observed variables of psychological capital are: Innovation and risk-taking (PC.1), self-efficacy (PC.2), and entrepreneurial happiness (PC.3). Observed variables for entrepreneurial opportunity identification are: You can find business opportunities earlier than others when starting a business (EOI.1), you have got enough resources from others or by yourself before starting a business (EOI.2), you are clear about what you are going to do and how to do it when planning a new business (EOI.3), and you are ready to face a failure when you are planning a business (EOI.4). The observed variables of entrepreneurial environment perception are: Financial and credit policies (EEP.1), entrepreneurial culture (EEP.2), government administrative support (EEP.3), government service support (EEP.4), economic development (EEP.5), and infrastructure construction (EEP.6). The observed variables of entrepreneurial performance are: Financial performance (EP.1), customer performance (EP.2), internal business process performance (EP.3), and learning and growth performance (EP.4).

Figure 1. Effect path. Note: Path index is a standard value. *** means being significant on the level of 0.001.
Table 4 shows the standard path index of the indirect effect of social and psychological capital of the new generation of migrant workers on their entrepreneurial performance by maximum likelihood estimation. Thus, a great fit exists between social capital, psychological capital, entrepreneurial opportunity identification, entrepreneurial environment perception, and entrepreneurial performance of the new generation of migrant workers.

**Table 4. Standard Path Index.**

<table>
<thead>
<tr>
<th>Potential/Observed Variables</th>
<th>Path</th>
<th>Potential Variables</th>
<th>Standard Path Index</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>entrepreneurial opportunity identification ← social capital</td>
<td>0.125</td>
<td>1.317</td>
<td>0.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>entrepreneurial opportunity identification ← psychological capital</td>
<td>0.763</td>
<td>7.277</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>entrepreneurial environment perception ← social capital</td>
<td>0.273</td>
<td>2.686</td>
<td>0.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>entrepreneurial environment perception ← psychological capital</td>
<td>0.394</td>
<td>3.885</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>entrepreneurial performance ← entrepreneurial opportunity identification</td>
<td>0.605</td>
<td>9.615</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>entrepreneurial performance ← entrepreneurial environment perception</td>
<td>0.354</td>
<td>6.097</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>social support ← social capital</td>
<td>0.713</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>social trust ← social capital</td>
<td>0.683</td>
<td>14.195</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>social network ← social capital</td>
<td>0.692</td>
<td>12.589</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>social participation ← social capital</td>
<td>0.464</td>
<td>9.301</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>social prestige ← social capital</td>
<td>0.600</td>
<td>12.406</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>entrepreneurial happiness ← psychological capital</td>
<td>0.658</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-efficacy ← psychological capital</td>
<td>0.737</td>
<td>12.764</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>innovation and risk-taking ← psychological capital</td>
<td>0.700</td>
<td>12.121</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding entrepreneurial opportunity earlier than others ← entrepreneurial opportunity identification</td>
<td>0.702</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get enough resources from others ← entrepreneurial opportunity identification</td>
<td>0.664</td>
<td>13.789</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear about what to do ← entrepreneurial opportunity identification</td>
<td>0.683</td>
<td>13.939</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ready to face a failure ← entrepreneurial opportunity identification</td>
<td>0.641</td>
<td>12.926</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>economic development ← entrepreneurial environment perception</td>
<td>0.561</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>government service support ← entrepreneurial environment perception</td>
<td>0.599</td>
<td>10.263</td>
<td>***</td>
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<tr>
<td>government administrative support ← entrepreneurial environment perception</td>
<td>0.639</td>
<td>10.479</td>
<td>***</td>
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<tr>
<td>entrepreneurial culture ← entrepreneurial environment perception</td>
<td>0.763</td>
<td>11.874</td>
<td>***</td>
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<tr>
<td>financial and credit policies ← entrepreneurial environment perception</td>
<td>0.604</td>
<td>10.068</td>
<td>***</td>
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<tr>
<td>infrastructure construction ← entrepreneurial environment perception</td>
<td>0.493</td>
<td>9.057</td>
<td>***</td>
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<tr>
<td>financial performance ← entrepreneurial performance</td>
<td>0.827</td>
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<tr>
<td>learning and growth performance ← entrepreneurial performance</td>
<td>0.662</td>
<td>15.112</td>
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<tr>
<td>internal business process performance ← entrepreneurial performance</td>
<td>0.621</td>
<td>13.762</td>
<td>***</td>
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<tr>
<td>customer performance ← entrepreneurial performance</td>
<td>0.741</td>
<td>18.239</td>
<td>***</td>
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<td></td>
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<tr>
<td>Social capital ← psychological capital</td>
<td>0.773</td>
<td>9.107</td>
<td>***</td>
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</tr>
</tbody>
</table>

***: means being significant on the level of 0.001. This has been explained in the at the foot of Figure 1.
4.4. Empirical Findings and Hypothesis Verification

Psychological capital has a more significant positive effect than social capital on the entrepreneurial opportunity identification of the new generation of migrant workers. The standard path index of social capital to entrepreneurial opportunity identification is 0.125, which is below the level of significance; that of psychological capital to entrepreneurial opportunity identification is 0.763, which means that there is a significant positive effect of psychological capital on entrepreneurial opportunity identification. Thus, the finding contradicts the results of other scholars, who claim that social capital plays a more important role than this study suggests.

Results indicate that psychological capital has a more significant positive effect on entrepreneurial environment perception than social capital. The standard path index of social capital to entrepreneurial environment perception is 0.273, and 0.3943 for psychological capital to entrepreneurial environment. There is no previous research that has investigated the relationship between social and psychological capital and entrepreneurial environment perception. Thus, the findings contribute to partly addressing the gap by indicating that psychological capital has a significant positive effect on the entrepreneurial environment perception.

Results suggest that there is a significant positive effect of entrepreneurial opportunity identification on the entrepreneurial performance of the new generation of migrant workers. The standard path index of entrepreneurial opportunity identification on entrepreneurial performance is 0.605, which means that entrepreneurial opportunity identification has a significant positive effect on entrepreneurial performance. Factor loading for the question “are you able to find entrepreneurial opportunity earlier than others” is 0.702 and for the question “are you clear about what to do and how to do it” is 0.683. These findings indicate that these two variables are related to entrepreneurial performance.

The standard path index of entrepreneurial environment perception on entrepreneurial performance is 0.354. Therefore, quantitative data indicate that there is a significant positive effect of entrepreneurial environment perception on the entrepreneurial performance of the new generation of migrant workers. Factor loadings for economic development, government service support, government administrative support, entrepreneurial culture, and financial and credit policies are 0.561, 0.56, 0.599, 0.639, 0.763, and 0.604, respectively. The factor loading for entrepreneurial culture is higher than that of the other factors. This suggests that it has the greatest effect on entrepreneurial performance.

This paper has concluded that entrepreneurial opportunity recognition and entrepreneurial environment perception play intermediary roles between social capital, psychological capital, and entrepreneurial performance for the new generation of migrant workers. The research findings have been complied in Table 5, which demonstrated that the hypotheses in this paper are partly verified.

<table>
<thead>
<tr>
<th>Path</th>
<th>Expected Direction</th>
<th>Examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive effect of social capital on entrepreneurial business identification</td>
<td>+</td>
<td>unverified</td>
</tr>
<tr>
<td>Positive effect of psychological capital on entrepreneurial business identification</td>
<td>+</td>
<td>verified</td>
</tr>
<tr>
<td>Positive effect of social capital on entrepreneurial environment perception</td>
<td>+</td>
<td>unverified</td>
</tr>
<tr>
<td>Positive effect of psychological capital on entrepreneurial environment perception</td>
<td>+</td>
<td>verified</td>
</tr>
<tr>
<td>Positive effect of entrepreneurial business identification on entrepreneurial performance</td>
<td>+</td>
<td>verified</td>
</tr>
<tr>
<td>Positive effect of entrepreneurial environment perception on entrepreneurial performance</td>
<td>+</td>
<td>verified</td>
</tr>
</tbody>
</table>
5. Conclusions and Recommendations

Through data analysis and data reduction, this research has reached the following conclusions.

Results of this study indicate that the social capital of the new generation of migrant workers should be divided into five dimensions: Social prestige, social network, social participation, social support, and social trust. The new generation of migrant workers’ psychological capital is divided into four dimensions: Entrepreneurial happiness, self-efficacy, innovation, and risk tendency.

Analysis of quantitative data suggests that the new generation of migrant workers’ entrepreneurial environment perception can be divided into six dimensions: Financial credit policy, entrepreneurial culture atmosphere, government administrative support, government service support, economic development level, and infrastructure construction environment. The results of this research revealed that entrepreneurial performance should be divided into four dimensions: Financial performance, customer performance, learning and growth performance, and internal business process performance. The findings of this research make a contribution to knowledge by gaining a deeper understanding of social capital, psychological capital, entrepreneurial environment perception, and entrepreneurial performance of the new generation of migrant workers.

The analysis of data has also revealed that psychological capital and social capital of the new generation of migrant workers influence their entrepreneurial performance through entrepreneurial opportunity identification and entrepreneurial environment perception. Findings of factor loadings for social support, social trust, social network, social participation, and social prestige are 0.713, 0.683, 0.692, 0.464, and 0.600, respectively. This suggests that social support, social trust, and social network are mostly related to social capital. Factor loadings for entrepreneurial happiness, self-efficacy, as well as innovation and risk-taking are 0.658, 0.737, and 0.700, respectively. This also indicates that the three variables are related to psychological capital.

Factor loadings for learning and growth performance, internal business process performance, and social capital are 0.662, 0.621, 0.741, and 0.827, respectively, which indicates that financial performance and customer performance are mostly related to entrepreneurial performance. Using the structural equation model, this study expands the research findings of Rui (2015) [17] and Hu (2014) [16]. The paper not only uncovers the relevance of social capital and psychological capital of the new generation of migrant workers on entrepreneurial performance, but also verifies the intermediary role of entrepreneurial opportunity recognition and entrepreneurial environment perception.

Finally, the paper also reveals that entrepreneurial opportunity identification, as a necessary component of business activities, plays a more significant role than entrepreneurial environment perception in entrepreneurial performance. These results are in line with the findings of Zhang (2013) [69].

Recommendations

This section elaborates policy recommendations derived from the primary collected data that would help the new generation of migrant workers in the Shaanxi province to develop successful start-ups. The government, through its policy, can influence the business environment with different measures, such as taxation, competition policy, government purchasing practice, inflation, protections, export promotions, environmental health regulations, and so on. The government can also help firms to develop competitiveness by improving their access to finance, information, professional advice, training, and infrastructure.

Quantitative data indicate that psychological capital is more important than social capital. However, improving the social capital of the new generation of migrant workers will significantly improve their entrepreneurial performance. Sixty-four point one percent of respondents lack the ability to actively search and understand entrepreneurial policies. The government could help by developing the right communication channels so that migrant workers can improve their ability to grasp entrepreneurial policies and market information. There is a need for a committee with the
responsibility to disseminate all information that may help the new generation of migrant workers to develop a sustainable business. It is not only about making information available to the new generation of migrant workers, but also helping them to develop skills to analyze data.

According to this research, psychological capital plays an important role for entrepreneurial success. Lack of innovation is preventing start-ups from fulfilling their full potential. Analysis of data has revealed that there is a shortage of new migrant workers with innovation skills. In order to ameliorate this situation, the government should be involved in the training of the new generation of migrant workers. Tailored training courses need to be carefully developed and delivered by the government to ensure that new migrant workers have the skills to develop start-ups. These courses should provide practical knowledge on entrepreneurship, marketing, strategy, business planning, finance, and quality. In addition, the government should also establish a risk protection mechanism, including risk insurance and subsidies, to reduce the loss of migrant workers and enhance their ability to resist risks.

In order to achieve high productivity and to remain competitive, Chinese rural start-ups in general must have access to infrastructure. The government can play a role by ensuring that infrastructure constraints are not limiting the progress of rural firms. The quantitative analysis indicated that entrepreneurial activity in rural areas could be limited by communication infrastructure and access to finance. Through investment and policy, the government can address these constraints and create an environment where innovation and entrepreneurship can thrive. The government, through policy, could facilitate access to capital. Subsidized credits, concealed subsidies, and tax exemptions might increase the number of start-ups in rural areas.

6. Limitations

The study has three limitations. First, the universality of self-compiled questionnaire was not well tested. Second, the research area was only limited to the Shaanxi province. This limited the representativeness and universality of the survey sample. Third, as Shaanxi is located in an underdeveloped region of the Western China, the majority of migrant entrepreneurs surveyed had started their own businesses in the form of a family-oriented entrepreneurship. The start-up cost is relatively low, without involving hiring people from the outside. However, the entrepreneurial performance is also generally low, and their annual revenue has been around 10,000 to 40,000 yuan, which is still far below that of family-based businesses in the developed regions of the Eastern China. Therefore, future research might focus on entrepreneurial performance in different regions of China. In particular, some interesting avenues of future research might be to investigate different types of self-employed entrepreneurship (hiring employees from outside or solo self-employed).

Author Contributions: H.M. organized the models and data collection, F.T.B. and C.Z. worked on the analysis and policy recommendations.


Conflicts of Interest: The research area is only limited to Shaanxi province. A larger sample including migrant workers from other provinces may lead to more accurate results.
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