

## CAREER CALLING OF NASCENT ENTREPRENEURS IN CHINA: STRUCTURE AND MEASUREMENT

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Living out one's calling is a subjective standard of career success. In this study, we used qualitative and quantitative methods to examine the structure and measurement of career calling among young entrepreneurs in a Chinese cultural context. Qualitative data were obtained from a focus group of 20 entrepreneurs who had graduated from college within the previous 3 years, and quantitative data were obtained from a survey completed by 298 young entrepreneurs. Results of exploratory and confirmatory factor analyses showed that the entrepreneurial calling of nascent entrepreneurs in China can be accurately measured with a 13-item scale that includes 2 dimensions: purpose and meaningfulness. The Brief Career Calling Scale for Nascent Entrepreneurs that we developed in this study is a practical and convenient measure that will be useful for academic research and for counselors and practitioners assessing young peoples' career progress.

*Keywords:* entrepreneurial calling, career calling, nascent entrepreneurs, entrepreneurship, career success, China.

An individual's perception of his or her work depends not only on the nature of the job itself (e.g., hard or easy, simple or complicated), but also on how he or she views it (Wrzesniewski & Dutton, 2001). Therefore, employees with similar demographic characteristics may have completely different perceptions of their work even when they do the same job. Researchers in the fields of theology and sociology have conducted many studies on the person–job relationship and sources of work meaning (Super & Šverko, 1995). Further, career calling has been found in psychology and organizational behavior contexts to be a significant construct linked to satisfaction with one's career (Wrzesniewski & Dutton, 2001).

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With the rapid development of China's economy, new entrants to the labor market—especially graduates from colleges—are increasingly following the trend of starting a firm of their own and seeking to become the boss of their own destiny (Tian & Xie 2012), so *nascent entrepreneurs*, defined in this study as entrepreneurs who have graduated from college within the past 3 years, form a unique group in China. Although they are confronted with various difficulties, such as capital, skills, and expertise, in the process of entrepreneurship, numerous nascent entrepreneurs have been found to perceive entrepreneurship as a subjective criterion of career success and self-identification (Tian & Xie, 2012). These young adults engage in entrepreneurship in pursuit not only of success but also of personal well-being and a career mission. That is, they seek to answer their entrepreneurial calling to achieve greater entrepreneurship commitment and satisfaction.

Zhang, Herrmann, Hirschi, Wei, and Zhang (2015) reported that career calling has positive effects on satisfaction with both work and life. That is to say, a strong sense of calling in a career context generates positive work and life results. Further, stronger career calling has been found to be linked with greater work satisfaction (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). This phenomenon provides a new perspective for psychological and behavioral research on nascent entrepreneurs. Thus, determining how to measure and cultivate entrepreneurship calling among nascent entrepreneurs, with the aim of improving satisfaction and performance, seemed to us to be imperative. In this paper we focused on the structure and measures of career calling for nascent entrepreneurs in a Chinese context.

## Literature Review

### Definition of Calling

The concept of one's *calling* originated in Judeo-Christian beliefs and thoughts, and referred to someone who has been summoned by God to engage in a particular vocation or to serve and answer God's requests (Davidson & Caddell, 1994). This definition is reflected in both classical and neoclassical schools of thought, and the calling variable entered into the society, psychology, and organizational behavior literature in the 1980s. According to Bellah, Madsen, Sullivan, Swidler, and Tipton (1985), Monastics and Christians are not the only people who work for others' or societal interests and feel a sense of intense meaningfulness and mission. Hence, they argued that individuals' relationship to their work could be divided into three orientations: job, career, and calling. Employees with a *calling* orientation hold the notion that work is an inseparable part of their identity. Thus, they work for the achievement of subjective success rather than a salary (Rosso, Dekas, & Wrzesniewski, 2010).

Recently, psychologists started to investigate the personal, social, and psychological backgrounds of calling, whereas organizational behavior researchers have typically studied the impact that calling has on both individuals and organizations, such as job satisfaction (Fine, 1996), organization performance (Lobene & Meade, 2013), and team commitment (Wrzesniewski, 2003). Although no consensus has been reached as far as the definition of the term is concerned, the basic connotation of calling has moved away from a religious perspective toward a broader secular view, such that all people can pursue a calling and sense of living a meaningful life through their job. Consistent with this argument, numerous researchers hold that having a calling entails having some kind of job or career. For example, Wrzesniewski et al. (1997), who belong to the neoclassical school of thought, asserted that a calling is a kind of vocation that satisfies public interests.

### **Dimensions and Measures of Calling**

Similar to the definition of calling, there is still argument about the dimensions and measures of calling. Duffy and Sedlacek (2010) believed calling has just one dimension, whereas Boyd (2010) claimed that it consists of two dimensions: transcendent summons and meaningfulness. To assess a specific type of calling based on the precise occupational context, Bunderson and Thompson (2009) created a six-item scale.

Additionally, perceiving a calling toward a particular career has been frequently studied in Western, but not Eastern, cultures. The only study we located in which the perception of career calling has been assessed in a Chinese cultural context was conducted by Zhang et al. (2015). They recruited a sample of 788 Chinese college students and identified three dimensions of calling: altruism, guiding force, and meaning and purpose. They also found that calling had a significant indirect effect on career decidedness, life meaning, and life satisfaction through the mediator of hope.

From the above review, we think research on calling is increasing but the field is rather new and research limitations are obvious. The first key limitation is that many existing measures are unidimensional, whereas career calling is a multidimensional construct (Praskova, Creed, & Hood, 2014). The second limitation is that few measures utilize language that addresses the perspective of a developing calling, which is appropriate for young and emerging adults. Developing a career calling during early adulthood involves complex exploratory behaviors and a willingness to experiment and engage in activities that have the potential to develop into a calling (Elangovan, Pinder, & McLean, 2010); thus, researchers need to examine calling in this context.

### The Present Study

To fill the gap in the extant literature, we employed qualitative and quantitative methods to probe the structure as well as measurement of calling. Qualitative research involves using an intuitive process to describe a meaningful phenomenon, and helps researchers to better understand individuals' life meaning, self-identification, and inner world. Thus, we believe this approach will be more effective than are natural science methods, such as experiment and intervention, to grasp the perception of calling among nascent entrepreneurs. Regarding qualitative research, the discourse of participants is deemed to be the only source of useful information. Through analyzing and interpreting this information, we should obtain the implied meaning behind this discourse to understand further individuals' understanding of calling and its essence. However, as the structure and dimensions of entrepreneurial calling remain unclear, we also employed quantitative methods in our research.

## Method

### Qualitative Data Collection

**Participants and procedure.** To develop quantitative survey items to assess the calling of nascent entrepreneurs we wanted to assess how young entrepreneurs view the effectiveness of career development. Thus, our first step was to review the literature on calling and then, with the consent of the alumni office at our university, create a focus group of young entrepreneurs, all of whom had graduated from university within the previous 3 years and had become nascent entrepreneurs, serving an industry section with some diversity. The participants' mean age was 24.4 years, with standard deviation of 0.2875.

We gathered the participants firstly based on the questionnaires concerning work orientation developed by Wrzesniewski et al. (1997). Of the 20 nascent entrepreneurs chosen to complete interviews, 14 were men and 6 were women. Before conducting this research, we gained informed consent from the participants and ethical approval from the institutional review board of our university, making sure that participants' recorded data were kept confidential during and after the recording and transcription process. Participants were invited to comment on the main aspects of calling related to entrepreneurship. All of their comments were recorded and later transcribed.

According to the transcribed discourses, some interviewees engaged in entrepreneurship immediately after graduation from university. Others waited 2 years after they graduated before starting a firm, and described themselves as persistent entrepreneurs with a great longing for entrepreneurship. Their discourse highlights their own sense of purpose and perceptions of meaningfulness gained from their work.

**Scale development.** We conducted content analysis and found that the entrepreneurial calling construct was made up of 35 different items, some of which were positive and others negative (see also Hinkin, 1998). These items were reviewed by five independent experts holding doctoral degrees in relevant subjects and having significant experience in scale development and validation, who commented on the aspects of career development and test construction (including phrasing, readability, response format, and instructions). After we received their ratings, we retained 21 items with a content validity index of .80 or greater, as recommended by Hinkin (1998). Thus, through organizing and coding the interview data, we removed seven complex items and retained 14 preliminary items based on the demographic variables of age, gender, level of education, employment status, and university major subject.

The experts then assessed the relevance, importance, and clarity of the items and classified them into two dimensions: purpose and meaningfulness. The coded statistics showed the following results: the dimension of purpose was the primary connotation of entrepreneurial calling, with a probability of being mentioned of 73% and an interrater reliability of .88, whereas for meaningfulness the probability of being mentioned was 60% and the interrater reliability was .82. This suggests that the coding results were acceptable.

These items were compiled into a questionnaire to be used for quantitative analysis with our sample of emerging entrepreneurs. Items were to be rated on a 7-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*.

### **Quantitative Data Collection**

**Participants and procedure.** We used the above preliminary survey to investigate further the measurement of entrepreneurial calling among nascent entrepreneurs. Between March, 2016, and January, 2017, a printed version of the survey was distributed in lectures at ChongQing Technology and Business University, and an electronic version of the survey was distributed in online entrepreneurship forums (ChongQing, 2016). We also used the snowball sampling technique to increase the sample size, by asking participants to forward the survey to other young entrepreneurs.

Of the 410 surveys we distributed, 314 were returned and 298 of them were valid (valid rate of return = 73%). Of the respondents, 79% were male, which is representative when considering the typical new venture population (Tian & Xie, 2012). The average age was 25 years,  $SD = 1.354$ , and about 26% had started up a new venture as undergraduates, with the rest having started their venture after graduation. In terms of firm size, the mean was four employees,  $SD = 0.432$ ; this also corresponds to the firm size numbers reported for the population of new ventures registered in China in the past 3 years (Tian & Xie, 2012).

## Results

### Exploratory Factor Analysis

First, we divided the quantitative sample ( $N = 298$ ) into two groups. Data from the first group ( $n = 149$ ) were used for exploratory factor analysis and data from the second group ( $n = 149$ ) were used for confirmatory factor analysis. We used Bartlett's test of sphericity (minimum criterion: significant at  $< .01$ ) and the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (minimum criterion: significant at  $> .70$ ) to assess if the samples were suitable for use in factor analysis. The chi square ( $\chi^2$ ) value of 0.000 and KMO value of .889 indicate that the variables were correlative and fit for use in factor analysis (Arbuckle, 2011).

We used factor loadings to assess the convergent validity and discriminant validity of the items. Convergent validity refers to there being a high level of correspondence (factor loadings near 1) among similar constructs, whereas discriminant validity refers to dissimilar constructs having a low level of correspondence (factor loadings near 0). Among the 14 preliminary items, one that was related to the opportunity to pursue one's entrepreneurial goal did not meet the above requirements. Thus, we removed it and reconducted the exploratory factor analysis.

Table 1. *Exploratory Factor Analysis Results for Career Calling After Item Revision*

Item	Loadings	Cronbach's $\alpha$	Variance explained
<b>Factor 1: Purpose</b>			
1. The only thing I want for my career is to run my own firm.	.786		
2. When I think about my dream for life, entrepreneurship comes to mind immediately.	.763		
3. Entrepreneurship is like a mission for my life.	.753		
4. My desire is to accomplish my mission for life, that is my calling.	.741	.828	
5. Entrepreneurship satisfies my aspiration of life.	.706		
6. Entrepreneurship infuses me with work passion.	.658		
7. This career path fills me with a sense of self-esteem.	.607		78.7%
<b>Factor 2: Meaningfulness</b>			
8. This career path is extremely important for me.	.717		
9. Entrepreneurship is my criterion for career success.	.673		
10. Entrepreneurship is a reflection of life meaning.	.668	.740	
11. Entrepreneurship helps to promote social innovation.	.637		
12. Entrepreneurship gives me an inspiring experience.	.591		
13. Entrepreneurship can generate job opportunity for others.	.522		

Results indicated that the 13-item calling scale had two common factors that we named *purpose* and *meaningfulness*. The items of each factor can be found in Table 1. All factor loadings were above .50, suggesting good convergent validity. The Cronbach's  $\alpha$  for the two factors were .828 and .740 respectively. The total variance explained by these two factors was 78.7%, a significant increase above the variance explained by one factor. This suggests that the reliability of the scale was good.

**Confirmatory Factor Analysis**

We used LISREL 8.5 to calculate the loading index for each corresponding variable. The results indicated that the standardized estimate values were all greater than .45 but below the critical value of .95, and that the *t* value of 9.455 was much larger than the minimum criterion of 1.96. These statistical results indicate that the index's factor loading and the fit indices of the evaluation model were all significant, suggesting high convergent validity. Thus, the observed variables were suitable for use in analyzing the entire evaluation model. The fit indices of the entire model were as follows:  $\chi^2 = 179.446$  ( $df = 63, p < .001$ ),  $\chi^2/df = 2.85$ , root mean square error of approximation (RMSEA) = .071, goodness-of-fit index (GFI) = .933, adjusted goodness-of-fit index = .906, root mean square residual = .088, comparative fit index (CFI) = .917, suggesting a good fit for exploratory factor analysis.

We also validated the factor structure of the 13 items of the entrepreneurial calling scale by testing two models. The first was a one-factor model in which all items were included as a single latent variable of career calling. The second one was a higher order factor model where only the three factors identified in the exploratory factor analysis were included as a second-order factor of career calling. The fit results for the models are shown in Table 2. In Model 2, the NFI, CFI, and GFI were all greater than .90 and the RMSEA was under .10, indicating a better fit based on all indices compared to Model 1. These results indicate that the 13 items were represented by two factors symbolizing the second-order factors of entrepreneurial calling, providing tangible evidence for our conceptualization of entrepreneurial calling as a multidimensional construct.

Table 2. *Fit Indices for Confirmatory Factor Analysis of Calling*

Index	$\chi^2$	<i>df</i>	$\chi^2/df$	GFI	NFI	CFI	RMSEA
M1: One-factor model	98.735	31	3.183	.834	.813	.872	.125
M2: Higher order factor model	75.246	26	2.894	.910	.882	.917	.077

*Note.* GFI = goodness-of-fit index, NFI = normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation.

## Discussion

Our study aims were to identify the structure and measures of career calling for nascent entrepreneurs in a Chinese context.

The above results show that the career calling of nascent entrepreneurs includes the dimensions of purpose and meaningfulness and can be measured by using the 13-item scale we developed. There are some similarities and differences in the dimension of meaningfulness between Chinese and Western cultural contexts. In the extant literature (Weinstein & Ryan, 2010; Bolino & Grant, 2016), *prosocial behavior*, which is defined as individuals' moral responsibility, dedication, altruism, and the resultant meaningfulness, is considered to be one part of the structure of career calling. In the present study, the calling dimension of meaningfulness emphasizes not only entrepreneurs' altruism but also their self-interest (e.g., ego-altruism). Under the present economic situation in China, *necessity entrepreneurship*, referring to entrepreneurs who are confronted with the critical issues of how to ensure the survival of their firm, accounts for a large proportion of new startup ventures, and even entrepreneurs with stronger career calling have to consider how to ensure the survival of their firm; hence, in this context, entrepreneurship is mainly reflected through ego-altruism. Compared to the altruistic aspect of career calling in Western research, Chinese entrepreneurs may focus on meaningfulness and place more emphasis on the realistic meaning of a calling. Similarly, transcendent summons (Boyd, 2010) did not appear to be a significant factor affecting career calling in the present study, reflecting the characteristics of China's social reality and economic culture, because a religious element is not significant for everyone. Thus, our findings add new insights to the literature on career calling and its effects on young entrepreneurs in a non-Western cultural context.

Of course, there are several limitations in this study. First, career calling is regarded as a developmental and dynamic construct (Weiss, Skelley, Haughey, & Hall, 2004). Therefore, it is extremely important to make use of an appropriate measure, such as multiple group analyses to test whether or not the factor structure is invariant across demographic factors. Second, as our studies were cross-sectional, we were not able to test the predictive validities of the new scale. This would be reflected, for example, in studies that demonstrated that higher scores on the scale at one point in time would be associated with individuals making more progress in reaching their career goals (e.g., finding a job in line with their calling) and greater well-being in the future. Longitudinal studies are also needed to demonstrate the stability of the new scale over time; for example, by assessing test-retest reliability.

The 13-item Brief Career Calling Scale for Nascent Entrepreneurs that we have developed provides a practical and convenient multidimensional measure that will be useful for academic research purposes, and for counselors and

practitioners who wish to assess the entrepreneurial career progress of young people in the Chinese cultural context.

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