

# Self-directed career attitude as predictor of career and life satisfaction in Chinese employees

## Calling as mediator and job insecurity as moderator

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### Abstract

**Purpose** – The purpose of this paper is to test if the effects of a self-directed career attitude on career and life satisfaction are mediated by a person's sense of calling and moderated by job insecurity in a sample of Chinese employees.

**Design/methodology/approach** – Among a sample of Chinese employees ( $n = 263$ ), in this paper, a moderated mediation analysis with bootstrapping was applied to test the hypotheses.

**Findings** – The results showed that calling mediates the effects of a self-directed career attitude on career satisfaction and life satisfaction. Job insecurity moderated the effect on life satisfaction but not on career satisfaction. The effect on life satisfaction were stronger under higher levels of job insecurity.

**Research limitations/implications** – These results suggest that a self-directed career attitude may help people develop a calling, which in turn relates to increased subjective career success and well-being. In addition, the notion of a calling may be especially important for well-being in unstable job circumstances.

**Originality/value** – This study is the first to explore a calling and a self-directed career attitude in a sample of Chinese employees. Corresponding to contemporary China's rapidly changing context of economy and career development, a self-directed career orientation plays an important role in Chinese employees' calling and subjective career success.

**Keywords** Calling, Job insecurity, Life satisfaction, Self-directed career attitude, Subjective career success

**Paper type** Research paper



The protean career orientation, a conviction that one wants to manage one's career in a self-directed and values-driven way (Hall, 1996), has been increasingly researched in career management and vocational psychology. It corresponds to the contemporary economic and work environment in which careers are highly flexible and people are encouraged to take more responsibility in their career management (DiRenzo and

Greenhaus, 2011). Research has shown that a protean career orientation is positively related to a broad range of outcomes, including career growth (Waters *et al.*, 2014), career self-management behaviors, and subjective career success (De Vos and Soens, 2008). A key component of the protean career orientation is a self-directed career attitude (Briscoe *et al.*, 2006). This self-directed career attitude was found to be associated with several career and life outcomes, such as a higher career satisfaction (Herrmann *et al.*, 2015) and greater work-life balance (DiRenzo *et al.*, 2015). However, our knowledge of why a self-directed career attitude is related to these positive outcomes remains incomplete, as does its exploration in non-Western cultures. Accordingly, the present study attempts to explore how a self-directed career orientation relates to career and life satisfaction in a Chinese context. China has witnessed dramatic economic, social, and cultural changes in the last decades with significant impact on people's career development. Chinese citizens today have possibly more freedom to make career choices and to develop a personally meaningful career than ever before (Zhou *et al.*, 2012). This suggests that a self-directed career attitude could have a positive impact on people's career and life more generally. In the present study, we empirically evaluate a model which proposes that a self-directed career attitude is related to higher career and life satisfaction because it is related to increased levels of presence of calling. We propose calling as a mediator because callings fit well in the context of protean careers as following the "path with a heart" could be motivated by a self-directed career attitude (Hall and Chandler, 2005). Moreover, because calling is suggested to be particularly important in a challenging context (Dobrow and Heller, 2015), we explore the role of job insecurity in this regard and test the assumption that the indirect effects through calling might be especially pronounced under the condition of high job insecurity. As such this paper makes several contributions to the self-directed career and calling literatures. First, we extend the understanding of the self-directed career attitude by examining its relationship with calling. Second, we provide new knowledge regarding the boundary conditions of when a person's calling is related to positive outcomes by introducing job insecurity as a moderator in this regard. Third, we conduct our research among Chinese employees, extending the literature with results from a non-Western sample.

### **Self-directed career attitude as a predictor of career and life satisfaction**

A self-directed career attitude emphasizes the independent role a person takes in promoting his or her vocational development (Briscoe *et al.*, 2006). An important notion in the literature is that a self-directed career attitude is beneficial for one's career success, especially subjective career success (King, 2004) – an assumption supported by empirical studies (e.g. De Vos and Soens, 2008; Volmer and Spurk, 2010). A self-directed career attitude motivates an individual to define his or her career success by an internal and subjective criterion, which may enhance their experienced career satisfaction and subjective career success (Hall and Chandler, 2005). In addition, a self-directed career attitude is positively related to career planning and perceived employability (DiRenzo *et al.*, 2015). It seems that people with self-directed career attitudes are thus more likely to perceive that they are capable of developing a career and are more motivated to engage in their careers.

Moreover, the positive effect of a self-directed career attitude may extend beyond work. DiRenzo *et al.* (2015) found that people with a protean career attitude are more likely to adopt a whole-life perspective on their career and experience better work-life balance. Empirical studies found that a self-directed career attitude is positively related

to a proactive personality and career authenticity (Briscoe *et al.*, 2006), suggesting that people who want to develop their careers in a self-directed way are more inclined to be proactive and follow their true selves in their career development. Research has demonstrated that this type of autonomy and proactivity is positively related to job satisfaction and life satisfaction (e.g. Prottas, 2008). These findings suggest that a self-directed career attitude may be related to a higher subjective well-being (e.g. life satisfaction) because we can assume that people are more satisfied with their lives if they can proactively follow their true selves to develop their careers (Hall and Mirvis, 1996). Thus, we propose:

- H1. A self-directed career attitude is positively correlated with career satisfaction.
- H2. A self-directed career attitude is positively correlated with life satisfaction.

### **Calling as a mediator between self-directed career attitude and career and life satisfaction**

Recently, scholars in vocational psychology (Dik and Duffy, 2009) and management (Elangovan *et al.*, 2010; Hall and Chandler, 2005) have started to focus on the notion of a calling as a special case of how people can identify and find meaning in their work. In Dobrow and Tosti-Kharas's (2011) definition, the notion of a "calling" refers to a consuming, meaningful passion for a particular career domain. Dik and Duffy (2009) defined "calling" as the transcendent summons to a particular life role that entails the experience of personal meaningfulness and other-oriented values. Callings can help to experience purpose and meaning as well as subjective well-being in both work and non-work domains (Dik *et al.*, 2015; Duffy and Dik, 2013). Having a calling emphasizes the intrinsic motivation over the extrinsic motivation to pursue a career (Dobrow and Heller, 2015), which fits well within the notion of the values-driven protean career. This suggests that a protean career attitude, particularly its self-directed aspect, could facilitate the development of calling. Indeed, Hall and Chandler (2005) specifically proposed that a protean career orientation might be a necessary condition for discerning a calling, which would in turn connect to subjective success. Yet, to our knowledge no research has examined this assertion empirically. Theoretically, a self-directed career attitude may motivate proactive behaviors to help people to know who they really are and what type of work they want, enhancing the meta-competency of identity awareness (Waters *et al.*, 2015). This self-awareness or self-exploration may be a basis of perceiving a calling (Elangovan *et al.*, 2010; Hall and Chandler, 2005). Indeed, the presence of calling is positively related to self-clarity (Duffy and Sedlacek, 2007), possibly because the awareness of one's true self may be a predictor of calling. We suggest that a self-directed career attitude can hence be beneficial for discovering and developing a calling. If people are self-directed, they are more likely to know what they want and expect in their careers and consequently are more likely to follow their heart's path when developing their careers (Hall and Mirvis, 1996). Therefore, we expect:

- H3. A self-directed career attitude is positively correlated with the presence of a calling.

There is considerable support for the notion that callings generally have positive effects. People with a calling are likely to perceive a higher sense of meaning in work and life, enhanced career commitment, and greater feelings of hope (Duffy and Dik, 2013; Hirschi, 2012; Zhang *et al.*, 2015b). Studies have also demonstrated that callings

are positively related to satisfaction in work and life (e.g. Hirschi, 2012; Park, 2010; Wrzesniewski *et al.*, 1997). Building upon *H1-H3*, we therefore propose that a calling serves as a mediator in the relation between a self-directed career attitude and career and life satisfaction:

*H4a.* The presence of a calling mediates the effect of a self-directed career attitude on career satisfaction.

*H4b.* The presence of a calling mediates the effect of a self-directed career attitude on life satisfaction.

### **Job insecurity as a moderator of the link between a calling and career and life satisfaction**

Job insecurity is defined as the “subjectively perceived and undesired possibility to lose the present job in the future, as well as the fear or worries related to this possibility of job loss” (Vander Elst *et al.*, 2013, p. 365). Because people with a calling place a high importance on work and fulfilling their calling through work (Zhang *et al.*, 2015a), job insecurity might be particularly relevant to them. Under the condition of high job insecurity, employees may feel that the future of their current employment is uncertain, which acts as a stressor. According to the conservation of resource theory, resources are particularly important under conditions of high demand and in the face of stressors (Hobfoll, 2002). A lack of job security should hence enhance the importance of existing supportive resources in the career domain. A calling can be such a psychological resource because it is related to a sense of efficacy and purpose and thus plays a crucial role in a challenging career and work context (Dobrow and Heller, 2015). A calling would hence be especially important when faced with high job insecurity. Thus, we propose:

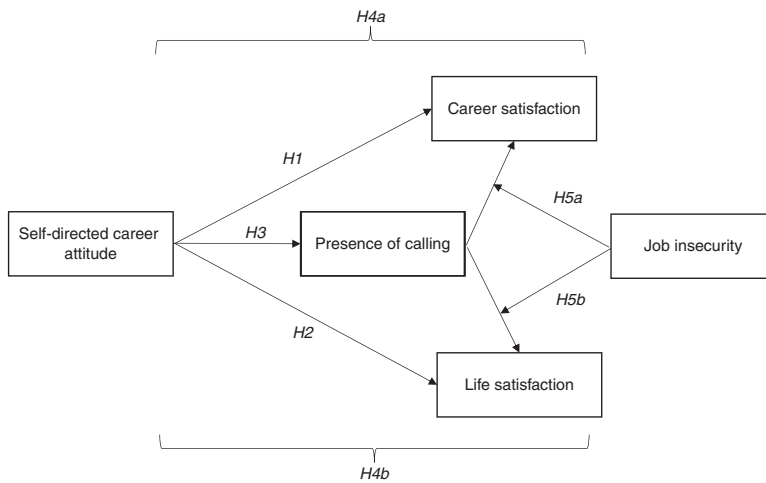
*H5a.* The effect of calling on career satisfaction is stronger under the condition of high job insecurity.

*H5b.* The effect of calling on life satisfaction is stronger under the condition of high job insecurity.

Taken together, we propose a mediated moderation model shown in Figure 1.

### **The present study context**

Although the notions of self-directed career management and calling were developed in a Western context, there is increasing evidence that they also play an important role in other cultures. In a qualitative study among Chinese college students, Zhang *et al.* (2015a) found that the notion of a “calling” included several facets: guiding force, purpose and meaning, altruism, and active tendency, which is generally consistent with the findings in Western samples, although the content of these dimensions showed some differences. For instance, in the Chinese definition, there are no religious roots and there is a greater emphasis on a sense of duty as part of a calling. In both Western and Chinese culture, a sense of calling could not only stem from external summons, but also from more inner or self-directed forces (Duffy and Dik, 2013; Zhang *et al.*, 2015a). External forces based on cultural values of piety and collectivism may affect Chinese people’s perceptions of calling (Zhang *et al.*, 2015a). However, research suggests that a calling that stems from strong external forces may result in negative outcomes, for instance a lack of decision-making freedom. In contrast, a more self-directed way to build one’s calling seems to have a more positive effect (Zhang *et al.*, 2015a). This shift



**Figure 1.**  
Hypothesized  
moderated mediation  
model

to more individualistic and self-directed career management can be explained by the great changes China was experiencing due the Reform and Open Policy launched in 1978. This new market economy dramatically influenced career development (Zhang *et al.*, 2002; Zhou *et al.*, 2012). Previously, careers were highly determined by the government and organizations (Zhang *et al.*, 2002). People were not allowed to choose a job but were assigned a job that was fixed and stable. In the 1990s, because of the emerging market economy, Chinese employees had to adjust to a new situation where the positions were no longer guaranteed (Sun and Wang, 2009). This economic transformation, along with China's entrance into the World Trade Organization in 2001, shifted Chinese people's career development from an externally determined way to a more self-directed way. People increasingly had to find a job for themselves and act in an independent and proactive way to develop their career (Wong and Slater, 2002). This is especially true for the generation emerging from the one child policy. These individuals, born in the 1980s, were the only child in the family. They were raised to become more competitive and individualistic and enjoyed more personal freedom when making career choices (Wong and Slater, 2002; Yi *et al.*, 2010). Therefore, especially for young Chinese employees having a self-directed career attitude might play a critical role to develop a sense of calling and to achieve subjective career success. Likewise, job insecurity is an important variable in the current Chinese labor market. In China, the number of university graduates increased steadily, from 1.14 million in 2001 to 7.27 million in 2014 (China Education Online, 2014), resulting in an extremely competitive and uncertain job market for university graduates. Under this circumstance, a sense of calling could be especially an important supportive resource for Chinese working adults' career development and well-being.

## Method

### *Participants and procedure*

We collected data using two methods. First, we advertised our online survey on several social network websites in China (e.g. Qzone, Zhihu, and Weibo). A total of 35 valid responses were recruited this way. Second, we used personal contacts to employees who in turn advertised our survey in their respective organizations. We provided the

contact persons with a brief description of the purpose of this survey. Using this procedure, participants could choose either an online or a paper-and-pencil survey. The online survey was completed directly by the participant via a link provided by the contact person. For participants who chose the paper-and-pencil survey, the questionnaires were distributed and collected by our contact persons in the organizations and sent back to us via postal mail. The online and paper questionnaires provided information about the general purpose of the survey (to study career development and well-being), the universities and researchers responsible for this survey, and general information about how to complete the survey. To reduce the potential effect of socially desirable response behavior, participants were assured that no feedback about their answers would be provided to their organizations. No compensation was offered as an incentive. We collected 113 responses from the online survey and 115 responses from the paper-and-pencil survey. Together with the sample from the social network websites, this resulted in an overall sample of 263 respondents. The participants came from more than 50 cities in China and engaged in a broad range of industries, including management, engineering, education, accounting, finance, and nursing. Of the participants, 122 (46 percent) were male; the majority of participants (92 percent) reported their ethnicity as Han; the remaining 8 percent were from six ethnic minority groups. The mean age was 26.67 years (ranging from 18 to 50,  $SD = 4.50$ ). Most of the participants ( $n = 257$ , 98 percent) worked full-time, and the remaining participants worked part-time. In terms of educational background, 32 (12 percent) reported that they finished high school or below, 57 (22 percent) finished junior college, 129 (49 percent) had a bachelor's degree, 43 (16 percent) had a master's degree, and 2 (1 percent) had a doctoral degree.

To ensure that the same constructs are measured across the modes of administration (online and paper-and-pencil), we applied measurement invariance testing based on the confirmatory factor analysis framework (Vandenberg and Lance, 2000). Based on this framework, we established measurement invariance (configural, metric, and scalar invariance) for the assessed constructs across the two modes of administration. We further found no mean differences in the assessed constructs and the demographic variables between people completing either version, except for age, with the sample completing the online survey being somewhat younger.

*Instruments*

Table I reports the means, standard deviations, reliabilities, and correlations among the assessed variables.

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Self-directed career attitude	5.33	0.97	<i>0.90</i>				
2. Presence of calling	3.58	0.91	0.39**	<i>0.65</i>			
3. Job insecurity	2.37	0.85	-0.16**	-0.13*	<i>0.77</i>		
4. Career satisfaction	3.28	0.88	0.31**	0.27**	-0.23**	<i>0.92</i>	
5. Life satisfaction	4.04	1.27	0.19**	0.39**	-0.06	0.39**	<i>0.87</i>

**Table I.** Descriptive statistics, correlations and reliabilities

**Notes:**  $n = 263$ . The numbers in the diagonal are the Cronbach's  $\alpha$  reliability coefficients (except for the presence of calling scale, for which the correlation between its two items is reported). \* $p < 0.05$ ; \*\* $p < 0.01$

*Self-directed career attitude.* Participants' self-directed career attitude was measured using the eight-item subscale from the protean career orientation survey by Briscoe *et al.* (2006). Participants answered on a seven-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). An example item is: "I am in charge of my own career." The items were independently translated into Chinese by the first and fourth author. After a discussion and comparison, the initial Chinese version of the scale was derived. Six masters and two doctoral students in psychology were invited to evaluate the original and the translated versions. The final version was confirmed after a consensus was achieved among the group. The scale reliability was reported by its developers with Cronbach's  $\alpha$ s ranging from 0.75 to 0.81 (Briscoe *et al.*, 2006). Prior research confirmed its validity and found positive correlation with a proactive personality, career authenticity, and career satisfaction (Briscoe *et al.*, 2006, 2012).

*Calling.* The presence of a calling was assessed by the Chinese version of the Presence of Calling subscale from the Brief Calling Scale (Dik *et al.*, 2012; Zhang *et al.*, 2015b). The two items "I have a calling to a particular kind of work" and "I have a good understanding of my calling as it applies to my career" were answered on a five-point scale ranging from 1 (not at all true of me) to 5 (totally true of me). This scale was found to be strongly correlated with the scores of other measures of calling, and the two items of this scale were highly correlated (0.79, Dik *et al.*, 2012). In a validation study of five measures of calling, the Brief Calling Scale was found to be the most useful instrument for assessing having a calling (Duffy *et al.*, 2015). The correlation of the two items was reported as 0.64 in a Chinese college student sample together with significant correlations to other calling measures and measures of life meaning, life satisfaction, and career decidedness (Zhang *et al.*, 2015b).

*Job insecurity.* Perceived job insecurity was measured with the four-item Job Insecurity Scale (Vander Elst *et al.*, 2013), using a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). An example item is: "I feel insecure about the future of my job." The items were translated into Chinese following the same procedure as described above. Previous studies have reported a good reliability of the scale ( $\alpha = 0.82-0.88$  across samples from five countries; Vander Elst *et al.*, 2013). Vander Elst *et al.* (2013) confirmed that the scale was invariant across samples from five countries and also found that it correlated negatively with self-reported performance and organizational commitment.

*Career satisfaction.* We used the five-item Career Satisfaction Scale (Greenhaus *et al.*, 1990) to assess the degree to which the participants felt they were satisfied with their careers. Participants answered on a five-point scale that ranged from 1 (strongly disagree) to 5 (strongly agree). An example item is: "I am satisfied with the success I have achieved in my career." Pan *et al.* (2011) reported a Cronbach's  $\alpha$  of 0.75 in a Chinese employee sample, confirmed the unidimensionality of the scale, and found positive correlations with self-efficacy, supervisory mentoring, and job performance.

*Life satisfaction.* The Chinese translation of the five-item Satisfaction with Life Scale (Diener *et al.*, 1985; Zhang *et al.*, 2015b) was used to measure global satisfaction with life. The scale uses a seven-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). An example item is: "In most ways my life is close to my ideal." A previous study has reported an adequate reliability of the scale score in Chinese samples (ranging from 0.78 to 0.83, Zhang *et al.*, 2015b) and has also found positive correlations with calling, dispositional hope, and life meaning.

**Results**

*Preliminary analysis*

Prior to the main analysis, we conducted several preliminary analyses. First, we tested the scale score distribution of the measures and found all of them to be normally distributed. Second, correlations among the assessed variables are displayed in Table I. As hypothesized, a self-directed career attitude was positively correlated with the presence of a calling, career satisfaction, and life satisfaction, giving preliminary support to *H1*, *H2*, and *H3*.

*Mediation model*

In a first step, we tested the mediation models without considering the moderation effect. We adopted the mediation SPSS macro (PROCESS) developed by Hayes (2012), providing a bootstrapping with 5,000 bootstrap samples and bias-corrected confidence intervals (CI) to test the significance of the indirect effects. If the 95 percent CI for the estimates of the mediation effect does not include zero, it suggests that the indirect effect is statistically significant at the 0.05 level (Shrout and Bolger, 2002). In a first step, we controlled for several demographic variables (i.e. gender, age, and educational background) but found that they did not change the pattern of the results (i.e. effect sizes and significances). Therefore, we excluded them in the following analyses.

The results indicated a significant specific direct effect from self-directed career attitude on calling ( $\beta = 0.37$ ,  $SE = 0.05$ ,  $p < 0.001$ ), career satisfaction ( $\beta = 0.28$ ,  $SE = 0.05$ ,  $p < 0.001$ ), and life satisfaction ( $\beta = 0.25$ ,  $SE = 0.08$ ,  $p < 0.01$ ). Calling also had significant specific direct effects on career satisfaction ( $\beta = 0.29$ ,  $SE = 0.06$ ,  $p < 0.001$ ) and life satisfaction ( $\beta = 0.52$ ,  $SE = 0.09$ ,  $p < 0.001$ ). We also found significant indirect effects from self-directed career attitudes on career satisfaction ( $\beta = 0.11$ ,  $SE = 0.03$ ; 95 percent CI: 0.05-0.16) and on life satisfaction ( $\beta = 0.19$ ,  $SE = 0.04$ ; 95 percent CI: 0.10-0.29) through the increased presence of a calling, supporting *H4a* and *H4b*. The model explained 17 percent of the variance in career satisfaction and 15 percent of the variance in life satisfaction, both  $p < 0.001$ .

*Moderated mediation model*

Next, we included job insecurity into our model as a moderator to assess the moderated mediation model with the SPSS macro PROCESS (Hayes, 2012). This approach provides conditional indirect effects at specified levels of the moderator. Two methods were used to examine the significance of the conditional indirect effect. First, we conducted a multiple regression analysis with interaction effects (Table II).

Predictor	Career satisfaction				Life satisfaction			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Self-directed career attitude	0.16	0.06	2.86**	0.005	0.07	0.08	0.84	0.404
Presence of calling	0.27	0.06	4.64***	0.000	0.51	0.09	5.92***	0.000
Job insecurity	-0.16	0.06	-2.71**	0.007	-0.05	0.09	-0.61	0.546
Presence of calling × job insecurity	-0.01	0.06	-0.19	0.848	0.25	0.09	2.72**	0.007
<i>R</i> <sup>2</sup>	0.19***				0.17***			

**Table II.** Results of multiple regression for career satisfaction and life satisfaction

**Notes:**  $n = 263$ . \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Multiple regression analysis testing specific direct and interaction effects for job insecurity, the presence of a calling, and self-directed career attitude on career satisfaction and life satisfaction

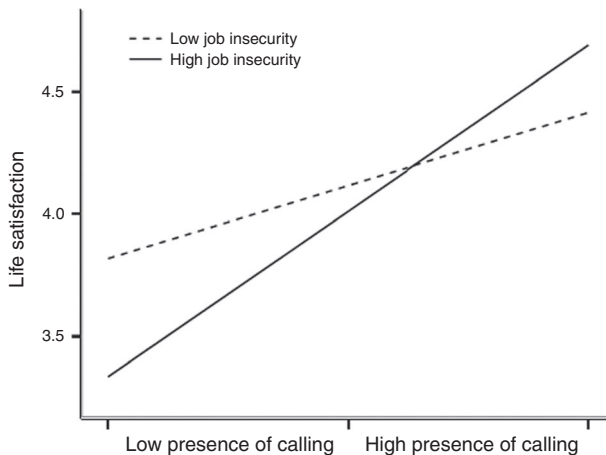


The regression results of the models indicated that the interaction between a calling and job insecurity was significant in predicting life satisfaction, supporting *H5b* that job insecurity moderated the relation between calling and life satisfaction. This interaction is shown in Figure 2. However, contrary to *H5a*, a non-significant interaction ( $p = 0.85$ ) was found in predicting career satisfaction. In order to explore the conditional effects in more detail, we applied bootstrapping analysis with 5,000 bootstrap samples and bias-corrected confidence intervals to test the magnitude and significance of the conditional indirect effect at several levels of the moderator. The results of the conditional indirect effect at the 10th, 25th, 50th, 75th, and 90th percentiles of the level of job insecurity supported the moderating effect of job insecurity in the regression analysis regarding the relation between a calling and life satisfaction (*H5b*). Specifically, the indirect effect of self-directed career attitude through a calling on life satisfaction were only significant above the 10th percentile of job insecurity. Moreover, the size of the effect increased with an increasing level of job insecurity (ranging from  $B = 0.06$ ,  $SE = 0.07$ , 95 percent  $CI = -0.06-0.21$ , at the 10th percentile of job insecurity, to  $B = 0.24$ ,  $SE = 0.06$ , 95 percent  $CI = 0.14-0.36$ , at the 75th percentile). In contrast, no moderation was observed regarding the indirect effect on career satisfaction, as the effect did not differ by the level of job insecurity (refuting *H5a*).

## Discussion

The primary purpose of this study was to explore the relation between self-directed career attitude, the presence of a calling, and career and life satisfaction in the context of Chinese culture. Our study is the first to our knowledge to explore the empirical relation between a self-directed career attitude and the presence of a calling while also examining the moderating effect of job insecurity on the relation between a calling and career and life satisfaction. In addition, our study is the first we are aware of to explore a calling and a self-directed career attitude in a sample of Chinese employees.

The results of our study supported that a self-directed career attitude is positively related to Chinese employees' perception of calling, and to their career and life satisfaction. These findings advance the literature on self-directed career development and help to explain why a self-directed career attitude is related to subjective career success and well-being. The results suggest that also in the Chinese context, traditionally



**Figure 2.**  
The moderating  
effect of job  
insecurity on the  
relationship between  
a presence of calling  
and life satisfaction

considered to be more collectivist but changing dramatically due to the contemporary market economy, a self-directed career orientation represents an asset to achieve career success and well-being. Moreover, our results suggest that a self-directed career attitude also relates positively to the presence of a calling among Chinese employees. In this way, our study contributes to the research literature on callings, where many researchers have pondered the question about how callings can be found and developed (e.g. Dobrow, 2013; Hirschi and Herrmann, 2013). Our findings suggest that a self-directed career attitude may help people discovering a calling. A potential interpretation is that a self-directed career attitude emphasizes following one's own objective in developing one's career. This might motivate individuals to perceive or discern their career callings by following their own values and purposes, which in turn might help finding happiness in the career and life domain. Several studies have suggested the importance of understanding the self and possessing a clear self-knowledge for discovering one's calling (e.g. Elangovan *et al.*, 2010; Hall and Chandler, 2005). In the Chinese culture, a self-oriented view or inner force also emerged as important components in defining callings (Zhang *et al.*, 2015a). Thus, the awareness of one's true self may be a basis of discovering a calling in Western and non-Western cultures.

Our results also supported the moderating role of job insecurity in the relationship between a person's calling and life satisfaction. This is consistent with the assertion that calling is particularly important in challenging contexts (Dobrow and Heller, 2015) and enriches the calling literature by clarifying the conditions under which a calling might exert positive effects. In our Chinese employee sample, a calling was more strongly related to life satisfaction for employees with higher job insecurity. Previous research has demonstrated that callings played a positive role in employees' well-being (e.g. Duffy and Dik, 2013). Our study further highlights the positive effect of a calling in a more complex context. Due to being uncertain about keeping their job positions, people are inclined to worry about their jobs and consequently might focus more on their jobs or careers. Lee and Peccei (2007) argued that employees with higher job insecurity are more likely to value the support from the organization. Analogously, our results suggest that employees who experience higher job insecurity are more likely to ascribe greater importance to a calling as a provider of meaning and purpose in life, despite – or particularly under the condition of – heightened job insecurity. Thus, the positive relation between a calling and life satisfaction seems to be magnified because callings might serve as motivators for employees to view their lives more positively.

Contrary to our hypothesis, the effect of a calling on career satisfaction were not affected by the level of job insecurity. A possible explanation may be that, given that callings and career satisfaction are both career-related variables, when evaluating career satisfaction, a calling might be a positive factor no matter what level of job insecurity employees may experience. In both secure and insecure job situations, when people evaluate their career satisfaction, having a deeply meaningful and purposeful career is equally important. Thus, the effect of a calling on career satisfaction would remain the same.

#### *Limitations and future directions*

There are some limitations to consider in the present study. First, our analysis was based on cross-sectional data. Thus, we cannot make assertions about causality and it is possible that reverse effects (e.g. from calling on self-directed career attitude) might also be true. To address this limitation, longitudinal designs should be applied in future research. Second, although we investigated a broad range of occupations, the

participants of our study were mostly young and well-educated. Thus, it is important in future research to investigate more diverse samples, including older employees and employees with lower educational levels. Third, because all data were self-reported and assessed by translated scales, common method bias cannot be fully ruled out. Fourth, we used the two-item brief calling scale to measure calling. Although this scale is a good indicator of having a calling (Duffy *et al.*, 2015), calling was suggested to be more multi-dimensional (e.g. Dik *et al.*, 2012), even in the Chinese culture (Zhang *et al.*, 2015b). Thus, future research could apply multi-dimensional measures of callings in a sample of Chinese employees. Fifth, because our findings are based on the sample of Chinese employees, its generalizability to a Western context should be made with caution.

### *Implications and conclusion*

Our study supports the importance of the independent self in finding a calling and happiness for Chinese employees. Thus, counseling or management programs should realize the increasingly proactive and independent role of Chinese employees in developing their careers in order to find meaning and satisfaction in their jobs and lives. This recommendation seems to be particularly important for young employees who often no longer passively follow a socially pre-described career path (Zhang *et al.*, 2002). Instead, many young employees in China might want to take an active role in managing their career and control the direction of their career development. Supporting a self-directed career attitude in career counseling and management thus seems critical. This could be achieved by encouraging proactive career behaviors, for example by providing social support, enhancing self-efficacy beliefs, but also addressing personal challenges and barriers in career development (Hirschi *et al.*, 2013). In addition, our study shows that especially clients who suffer from adverse job conditions such as high perceived risk of job loss might benefit from a calling. Thus, having a calling could increase Chinese employees' hope in an unstable job situation (Zhang *et al.*, 2015b), helping them to cope better with this difficult situation. Taken together, our findings could make a contribution to help Chinese employees to build a better career and life under the background of the intense labor market in current China.

In conclusion, this study demonstrates that a self-directed career attitude may relate to Chinese employees' sense of calling, and in turn relates to greater career satisfaction and life satisfaction. Calling's positive effect on life satisfaction is strengthened when the employees feel a higher level of job insecurity. More generally, these results provide support for the utility of these constructs to understand career development in the Chinese context. We encourage future research to investigate similar issues in other non-Western contexts and to expand this investigation by including multi-dimensional views of callings, the distinction between having and living a calling, and how the specific work context might affect the emergence and functioning of callings.

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