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Role of job mobility frequency in job satisfaction changes: the mediation mechanism of job-related social capital and person–job match

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Employees' high job mobility is detrimental to the healthy and sustainable development of enterprises. It may be resolved by identifying the internal mechanism by which job mobility is associated with job satisfaction. However, few studies have examined it clearly. Thus, decision-making in human resource management lacks a theoretical basis. The present study attempts to fill this gap from the perspective of job-related social capital and person–job match. Using survey data from 1348 employees with a tenure of 1–3 years in information service enterprises in China, this study conducts an empirical analysis of the aforementioned relationships. The results show that, in the context of the high frequency of job mobility, the 'Honeymoon Effect' has a positive association with job satisfaction in the short term. In the long term, the frequency of job mobility has a negative indirect association with job satisfaction through person–job match and job-related social capital. Among these mediation mechanisms, job-related social capital has a positive association with person–job match, which contributes to and strengthens the aforementioned negative intermediary process. The results highlight the positive role of job mobility frequency on job satisfaction in the short term and the negative role in the long term. The findings provide useful references and suggestions to help individuals improve their job satisfaction and enterprises to formulate efficient human resource management strategies.

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Introduction

With the ongoing development of the double transformation of China's socioeconomic structure, the middle class in society, as represented by persons engaged in knowledge-intensive labour, has grown rapidly. Such persons are primarily engaged in mental labour and have strong learning and innovation abilities (Lanxia et al., 2019). They also have a high level of human capital, which can facilitate significant knowledge capital appreciation in enterprises; that is, they represent the core competitiveness of enterprise development (Weilin and Xinqi, 2019). Such talented persons always have a high level of autonomy and are more sensitive to job satisfaction in terms of the degree of match between their expectations and various job attributes (Zhao et al., 2020). However, when this satisfaction is low and leads to the frequent flow of employees among organisations (Congying and Dongtao, 2017), it results in the loss of tacit knowledge, instability of talent structure, and decreased business performance (Yuhong et al., 2016). In particular, enterprise employees in the early stage of their career have greater motivation to find new opportunities and accumulate rich work experience, resulting in greater job mobility, which is mostly referred to as interorganisational mobility (Duarte and Lopes, 2018). To improve this situation, many scholars have studied the factors that influence job mobility and how harmful job mobility can be reduced effectively (Chen et al., 2016; Park, 2018). Some scholars have discovered a 'Honeymoon Effect' of job mobility, which means that individuals can experience relatively high job satisfaction after changing jobs, but the duration of this is usually short (Chadi and Hetschko, 2018).

However, most current studies ignore an important question regarding what really happens in the process of moving from one job to another. Do employees really get a higher level of job satisfaction after mobility from a long-term perspective? In other words, do they feel more satisfied with all aspects of the new job (Zhao et al., 2020)? If not, how can they realise that purpose through the rational process of job mobility? The answers to these questions largely determine what kind of mobility strategy employees will adopt in the future. By uncovering the internal mechanism of job mobility, the problem of employees' frequent job mobility can fundamentally be solved.

In the process of looking for new jobs, only when the match improves between the job requirements of new jobs and the employee's own needs can employees improve their job satisfaction (Masykuroh and Muafi, 2021). Knowledge-intensive employees would pay more attention to the person-job match regarding the relationship between their specialty and job demands (Gaižauskienė and Tunčikienė, 2018). Therefore, eliminating the information asymmetry between job seekers and employers to the best extent possible is necessary. Information or direct help provided by social networks during the job search process could effectively solve this problem by significantly improving the match between individuals and jobs (Weng and Xu, 2018). Previous studies have shown that the richer the resources and information embedded in social networks, the greater the improvement in satisfaction with a new job and the better the person-job match (Bian, 1997; Xiong et al., 2017; Bian, 2022). Furthermore, the resources and information here are usually embedded in job-related networks; this is referred to as job-related social capital (Bian et al., 2020).

However, individual social network relationships are constantly developing and changing (Fischer and Offer, 2020). Original relationships need to be actively maintained, and beneficial new relationships should be constantly constructed (Roberts and Dunbar, 2015) to foster personal development and maximise the benefits of social network relationships. However, because of the individual's limited time and energy (Dunbar, 1998), it is

impossible to encompass all aspects of the relationships constructed in the process of changing jobs, and there must be a trade-off between the construction and maintenance of strong and weak relationships (Hongbo et al., 2020). Nevertheless, when the frequency of job mobility is substantially high and the scale of the network that individuals need to build and maintain is considerably large, this trade-off seems to be more difficult for individuals, which undoubtedly decreases the quality of network relations: that is, whether or not the embedded and mobilised social capital is rich (Lin, 1995; Volker, 2020). Thus, the mechanism of social capital embedded in networks has undoubtedly played an important role between job mobility and job satisfaction.

According to the above theory, the process of job mobility has a significant association with the formation and change of employees' social networks, which will greatly affect the level of job satisfaction in the future. Therefore, it is important to determine how frequent job mobility will affect person-job match, social networks, and embedded social capital, so that employees may obtain higher job satisfaction in the future. However, few existing studies have investigated similar intermediary mechanisms that would explain how job mobility plays an important role in determining job satisfaction in a more reasonable manner (Moosa et al. 2022). To fill this gap, we will empirically analyse the internal mechanism by which frequent mobility of knowledge-based employees affects their satisfaction with new jobs from the perspective of person-job match and social capital.

The remainder of this study is as follows: The 'Literature review and hypothesis development' section expounds on the main theoretical basis and current status of this research topic and presents the corresponding research hypotheses; the 'Methods' section details data acquisition, variable composition, and descriptive statistical analysis of related data; the 'Results' section presents the results of statistical analysis; and the 'Discussion' section provides discussions, implications, and limitations.

Literature review and hypothesis development

The direct relationship between frequency of job mobility and job satisfaction. Studies have shown that the flow of employees among different organisations leads the former to accumulate a rich base of knowledge, technology skills, and experience, which have a significant positive impact on future career growth and job search success (Qingxiong and Bei, 2009). In addition, according to Kuck's Curve Theory, employees need to maintain a certain rate of transition between jobs to experience new challenges and maintain high creativity (Boswell et al., 2005). However, if employees move extremely frequently, that is, when the density of the flow between jobs is extremely high, they are often unable to obtain effective technology skills, knowledge, and experience in the different organisations or positions (Jianping et al., 2013; Westerman, 2021). Owing to opportunistic psychology, some employees place great importance on the superficial freshness of a new job or career or material pursuit, which eventually leads to confused individual career development, which is not conducive to the sustainable development of enterprises.

However, studies have shown that employees have high satisfaction for a period of time when they start a new job. Although the duration is not long, this so-called 'Honeymoon Effect' is significant (Chadi and Hetschko, 2018). When the frequency of mobility between jobs of employees is extremely large, they will experience high job satisfaction for a short time due to the 'Honeymoon Effect', although they cannot effectively obtain favourable knowledge and experience (Westerman, 2021).

Previous studies have verified the 'Honeymoon Effect' in different career stages of employee mobility and according to the initiative or passivity of employee mobility (Chadi and Hetschko, 2018; Duarte and Lopes, 2018). The number of employees flowing through the organisation significantly impacts organisational commitment (Equeter et al., 2018). However, research on the role of employee mobility in individual employment quality and the underlying mechanisms is rare.

'Knowledge intensive' employees pay particular attention to realising their own value and maximising their innovation ability; thus, they focus highly on the degree to which they are a good match for a given job (McDonald and Elder, 2006; Lanxia et al., 2019). Hence, they typically exhibit relatively high frequency of transitions between jobs in the early phase of their career (Duarte and Lopes, 2018). The target employees are the new ones with less than three years of work experience in the current enterprise, with most of them experiencing the 'Honeymoon' period at the enterprise. Thus, from a short-term perspective, the 'Honeymoon Effect' is likely to play a significant positive role, perhaps sufficient in magnitude to mask any possible negative roles of frequent job mobility. Additionally, employee turnover frequency considered here is generally high, and the difference between the impact of employees' active and passive mobility is most likely masked by the 'Honeymoon Effect' in each case (Chadi and Hetschko, 2018); thus, these two types of mobility are not specifically distinguished. In conclusion, the following hypothesis (H1) was proposed:

H1: Owing to the existence of the 'Honeymoon Effect', the frequency of job mobility of knowledge-intensive employees plays a significant positive role in their satisfaction with their new jobs from a short-term perspective.

Mediating role of person-job match and job-related social capital. Although the 'Honeymoon Effect' enables employees who frequently change jobs to obtain higher satisfaction in the short term, in the long term, possible negative associations and mechanisms cannot be ignored; however, these aspects have rarely been considered.

In the process of transitioning jobs between different organisations, job seekers can understand themselves more clearly and adapt to the environment, while recognising the gap between themselves and job requirements, and thereby continuously improve the person-job match in their new jobs (Beyer and Hannah, 2002; Carr et al. 2006). However, the longer an employee works in an enterprise, the deeper the professional knowledge, skills, and experience they obtain from the organisation (Gorry, 2016), which will help that individual find and achieve better matching jobs in the future (Zhenzhen, 2017). Clearly, if job mobility is extremely high, the experience with a given enterprise will be limited, and the individual cannot obtain effective knowledge and skills from that organisation (Westerman, 2021). Moreover, the relationship between limited work experience and the quality of future person-job matches will also be limited. Therefore, the greater the job mobility, the lower the quality of the person-job matches available to job seekers. Knowledge-based employees, who value the accumulation and application of human capital, cannot gain effective knowledge, skills, or work experience if they change jobs frequently.

'Job-related social capital' refers to the resources embedded in social network relationships related to career development (Yu and Jian'an, 2014). According to the theory of social capital, employees can not only accumulate knowledge, skills, and other human capital in the process of changing jobs but also build corresponding social network relationships (Yanjie et al. 2018). In the long-term process of interacting with colleagues and leaders

in different organisations, strong or weak relationships are constructed in which the embedded social capital containing faith and identities are gained concurrently (Dobrev and Merluzzi, 2018; Duan et al. 2021). The embedded job-related social capital can provide valuable information and direct help regarding future job transitions, thus facilitating better job search results (Weng and Xu, 2018). However, the longer an individual stays in one enterprise, the greater the trust, consensus, and cohesion that person achieves; that is, the individual attains greater depth of social capital. Through cross-border inter-organisational flow, employees can effectively expand their breadth of social capital (Dobrev and Merluzzi, 2018) with the help of the resource advantages of different organisations, thereby improving their own job-related social capital. However, the construction of effective social network relationships requires a minimum time investment (Granovetter, 1986). When job seekers flow between different organisations frequently, the shorter time available to construct network relationships is insufficient to accumulate effective industrial social capital, and it is also impossible to expand the breadth of social capital. According to the theory of social brain hypothesis (SBH) (Dunbar, 1998), owing to the limitation of individuals' time, energy, and cognitive constraint, the size of a personal social network cannot be considerably large (Sutcliffe et al., 2012). Frequent work transitions will divert employees' valuable energy so that they can maintain only scattered and ineffective network relationships (Krol et al., 2018). This inability to effectively focus on building advantageous network relationships would significantly reduce the level of social capital available to them. This will be particularly true for persons in knowledge-intensive careers, who usually need to expend considerable energy and time to build human capital; thus, the dispersion effect caused by frequent work transitions will be especially significant (Weilin and Xinqi, 2019). Additionally, the target employees are mostly in excessive transition between different enterprises for a relatively long time (more than half of whom have more than two years of experience). Therefore, from a long-term perspective, excessive frequency of job mobility will have a significant negative association with the formation of job-related social capital.

In addition, by providing job seekers with richer job information or direct help (Franzen and Hangartner, 2006), job-related social capital can help them find jobs that match their personal abilities and preferences (Horváth, 2014). Social capital can also provide emotional support (Yeh, 2015), which would likely have a direct positive relationship with job satisfaction (Xiong et al., 2017). Furthermore, the extent to which the match between employee and job is good will undoubtedly play a positive role in job satisfaction, especially given the weight placed by employees in knowledge-intensive careers on their subjective assessment of their job (Ellis et al. 2017). Thus, hypothesis (H2) was put forward:

H2: Frequency of job mobility plays a negative indirect role in job satisfaction through the change of person-job match and job-related social capital in the long term.

Serial multiple mediation mechanism of change of person-job match and job-related social capital. From the theory of social capital and SBH mentioned above, we acknowledge that the excessive frequency of job mobility will have a significant negative impact on the accumulation of effective resources in job-related social capital (Weng and Xu, 2018; Duan et al., 2021). This kind of job-related social capital will surely have limited information or direct help ability to help employees find more matched new jobs (Horváth, 2014). This suggests that job-related social capital transmits the negative association from the excessive frequency of

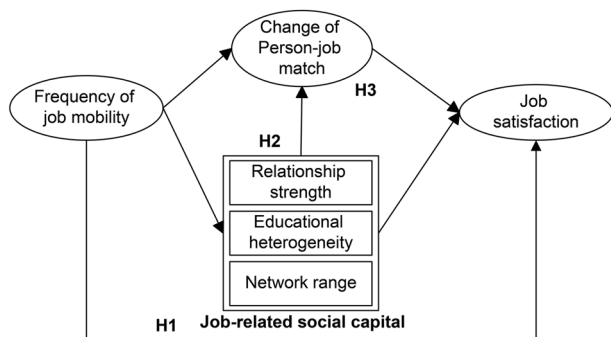


Fig. 1 Framework for analysing the relationship between frequency of job mobility and job satisfaction. Relationship strength, occupational heterogeneity, and network difference are the three core elements that constitute job-related social capital. Change of person–job match describes the improvement of the person–job match between current and first job. Change of person–job match and job-related social capital have played the critical intermediary role between frequency of job mobility and job satisfaction.

job mobility to the level of person–job match. However, according to the theory of work adjustment, if employees who have found their speciality do not have a good match with job demands, they will perceive that their personal values have not been realised, leading to a relatively low job satisfaction (Yuan and Gao, 2022).

According to the above theory, the frequency of job mobility will play a negative indirect role in job satisfaction through job-related social capital and then change the person–job match, which is called the serial multiple mediation mechanism. Therefore, the following hypothesis (H3) was formulated:

H3: The change of person–job match and job-related social capital will play a negative serial multiple intermediary role in the relationship between frequency of job mobility and job satisfaction.

Research framework. From the above theoretical analysis and relevant assumptions, the overall conceptual framework of the research is summarised in Fig. 1.

Methods

Selection of the study sample. We focused on employees in knowledge-intensive careers in information service enterprises. We selected six representative regions in the information service industry development in China: Xi’an, Shenzhen, Guangzhou, Suzhou, Hangzhou, and Shanghai, which also represent the balance of geographical distribution in the west (relatively less developed) and the east and south (relatively more developed) parts of China.

The samples were selected by using a stratified sampling method. In each selected city, we first chose the industrial park randomly, and then the information service enterprises were selected randomly in each selected industrial park. Finally, we chose the new employees who had a total work history of 1–3 years randomly from each selected enterprise. Employees without work mobility experience were retained as the control sample. The total sample size of the control and test group was 1348 individuals.

After obtaining the data, missing and abnormal values of all variables were eliminated, and employees aged 18–33 (early stage of career) were selected. There were no abnormal or missing values for any variable, and the maximum and minimum values were within the expected range. Specifically, the distribution of data among regions was relatively balanced. The demographic information of the respondents is presented in Table 1. The

Table 1 Demographics of the respondents (N = 1348).

| Employee’s information | n | 100% |
|---------------------------|-----|------|
| Gender | | |
| Male | 683 | 50.7 |
| Female | 665 | 49.3 |
| Age | | |
| 19–22 | 180 | 13.3 |
| 23–27 | 876 | 65.0 |
| 28–33 | 292 | 21.6 |
| Birthplace | | |
| Rural | 680 | 50.4 |
| Urban | 668 | 49.6 |
| Frequency of job mobility | | |
| ≤0.30 | 44 | 5.7 |
| 0.33–1 | 563 | 73.6 |
| 1.2–4 | 158 | 20.7 |

The statistical value for ‘Frequency of job mobility’ accounts only for employees with the experience of changing jobs (765 participants).

sample was relatively balanced in terms of gender, being composed of 683 men (50.70%) and 665 women (49.30%). Of the employees aged between 19 and 33 years, 876 were between 23 and 27 years (65%). There were 680 respondents from rural areas (50.40%) and 668 respondents from urban areas (49.60%).

Measurements of construct variables

Job satisfaction. Among past studies (Locke, 1976; Yousef, 2017; Zhao et al., 2020), job satisfaction was measured using mainly two methods: single-factor integral measurement and multi-dimensional comprehensive measurement (Wen et al., 2019). However, the deciding factor of job satisfaction differs because of differing levels of educated groups (Xiong et al., 2017). Thus, we employed multidimensional measurement methods to describe job satisfaction objectively and comprehensively. After all, this variable describes a set of psychological feelings about work and results from employees’ experiences in their jobs (Boh, 2022).

Specifically, job satisfaction was assessed with reference to Zhao’s scale (Zhao et al., 2020), which considers 15 job aspects. Answers to scale items were provided on a five-point Likert scale ranging from very dissatisfied to very satisfied. Subsequently, the dimensionality of the job satisfaction variables was reduced. First, exploratory factor analysis (EFA) was carried out to explore the construct of job satisfaction. The Kaiser–Meyer–Olkin (KMO) value was 0.80, and Bartlett’s sphericity test was significant; the cumulative variance explained reached 78.63%. After removing variables that exhibited cross-loadings or low extracted values, the job satisfaction variables were divided into two dimensions: job return and environmental satisfaction, which contain six best representative variables: salary, welfare, reward and punishment system, relationship with colleagues, relationship with leaders, and leader’s support and help. Next, confirmatory factor analysis (CFA) was conducted to verify the effectiveness of the new construct after the reduction of cross-loaded or low-extracted variables. The fit indexes were as follows: $\chi^2 = 15.09$, degrees of freedom = 5, $\chi^2/\text{degrees of freedom} = 3.02$, GFI = 0.996, CFI = 0.998, NFI = 0.996, RMSEA = 0.039. The overall fit of the model was good. The factor loadings of the variables of the two groups were >0.7, and the reliability coefficient α was high. The combined reliability values were 0.991 and 0.988 for the two factors, indicating that the reliability of the two factors was good. The average variance extracted values of the two groups of variables were greater than 0.7 and the square root was greater than the correlation coefficient of the two factors. The convergent

validity and discriminant validity of these groups of variables were good.

Independent and control variables. First, job mobility is a popular variable in vocational behaviour research, with varying measurements. While some studies consider the voluntary and involuntary types of job mobility's influence on life and job satisfaction (Chadi and Hetschko, 2021; Garthe and Hasselhorn, 2021), others also use the change times of job mobility to describe different motivations of job mobility across career stages, or the range of effect of job mobility on economic dividend (Duarte and Lopes, 2018; Zhao and Hu, 2019). To sum up, changing times is a common method for describing the job mobility variable. However, considering the different working years of employees included in this study, we applied the frequency of job mobility, which was measured by the number of job changes per unit of time, to avoid its interference. Specifically, the frequency of job mobility was calculated by dividing the number of companies at which the individual had worked by their years employed.

Second, the extent to which the person and job were well matched considered the difference between the match for the current job and that for the individual's first job. This study focused on a knowledge-intensive labour force, who are relatively more sensitive to the match between their career and their major (Gaižauskienė and Tunčikienė, 2018; Lanxia et al., 2019). Studies have also shown that a mismatch between speciality and work role will lead to a significant decrease in production efficiency and the poor allocation and waste of human resources (Suhong, 2018; Rui et al., 2019). Therefore, this study adopted the change in the match between speciality and job demands, as assessed by the following questions: 'What is the relationship between your first job and your major?' and 'What is the relationship between your current job and your major?' These questions were answered using a Likert scale, the value of which ranged from 1 to 4. The greater the value after flashback processing, the greater the degree of correlation. The rating for the first job match was subtracted from the rating for the current job match and recoded to be greater than or equal to 1 to generate the variable that reflected the change to which the person and job were well-matched. The larger the value, the better the match.

Third, the concept of social capital originated from sociology and economics. Scholars from both areas considered that social capital is a type of resource that can achieve the purpose of reciprocity between people (Loury, 1976; Bourdieu, 1991). Subsequently, social capital studies from the perspective of social networks formed a series of theories (Lin, 1995; Burt, 2004). The social capital network embedded theory has become the predominant notion since then (Shen and Bian, 2018; Bian et al., 2020). Here, job-related social capital refers to the social capital embedded in the social network relations that were used by employees to talk about job searching. It was assessed with reference to the method of measuring the social networks of Bian and other scholars (Yanjie, 2004; Wenhong, 2006). As the individual's job-related social network is a small-scale individual network, and the change in network scale has little association with job search results, job-related social capital embedded in the network relationship was measured only in terms of the two dimensions of 'network relationship' and 'network structure'. The specific constructs of each dimension are as follows.

Network relationship was assessed as relationship strength, which was measured as e-mail contact frequency, telephone contact frequency, and in-person meeting contact frequency. Factor analysis was used to reduce the dimensionality and to synthesise a relationship strength variable. The results of the EFA revealed a KMO value of 0.63 and a significant Bartlett's test; the overall variance extracted was 65.53%, and the loadings on the

three factors were greater than 0.73. The overall model was good. Along with job satisfaction variable, the total CFA result showed that fit indexes were as follows: $\chi^2 = 59.48$, degrees of freedom = 23, $\chi^2/\text{degrees of freedom} = 2.59$, GFI = 0.990, CFI = 0.993, NFI = 0.989, RMSEA = 0.034. The fit of the model was also good. In addition, the control-unmeasured single latent-factor method was used to test the possible common method variation (CMV) in the total model of job satisfaction and relationship strength. After adding the method potential factor, the fit indexes of the model were as follows: $\chi^2 = 59.48$, degrees of freedom = 22, $\chi^2/\text{degrees of freedom} = 2.70$, GFI = 0.990, CFI = 0.993, NFI = 0.989, RMSEA = 0.036. The fit of the model was good; as the χ^2 value changed little compared with the original model, there was no significant CMV problem.

Educational heterogeneity and network range were used to assess network structure. Educational heterogeneity refers to the number of members with different education levels in the job-related social network. The larger the value, the greater the network heterogeneity. Network range refers to the difference between the evaluation scores of the highest and lowest professional status score of members in the job-related social network. Refer to Li Chunling's method of calculating a professional reputation score (Chunling, 2005).

Finally, the relevant control variables were gender, age, place of birth, regional differences, consumption level, and employees' previous work experience (years). Birthplace was recoded into urban (1) and rural (0); other control variables were directly added to the model using their original coding.

Descriptive statistics and correlations. To adjust for the confounding effect of persons without work mobility experience, work experience was added to the model as a control variable. Among employees with experience of changing jobs, the proportion of the sample with a frequency of job mobility >0.33 accounted for 95.82% and 68.89% had a frequency >1. This indicates that most employees had moved jobs at least once a year. Referring to the Kuck Curve theory and the best job mobility cycle of 3–4 years as indicated in relevant studies (Jianping et al., 2013), we find that the frequency of job mobility of most people in the sample was excessively high, which foreshadows the negative association of frequency of job mobility. Furthermore, key variables exhibited significant correlations (Table 2), which provided a foundation for further causality analysis.

Results

Multiple regression analysis was used to assess the causal relationships among the variables. SPSS 25.0 was used with Process macro to analyse and test the intermediary roles in the model.

The 'Honeymoon Effect' of frequency of job mobility on job satisfaction. The coefficients for the regression equation are shown in Table 3. Models 1-2 and 1-4 show that the relationship between the frequency of job mobility and current job satisfaction was positive and significant ($p < 0.05$), whereas the direct association of the former with environmental satisfaction was not significant.

The intermediary role of change of person-job match and job-related social capital. The regression results show that the frequency of job mobility played a negative role in educational heterogeneity ($-0.22, p < 0.10$) but that no significant association was observed with relationship strength and network range (results not shown because of space constraints). In addition, the results of Model 1-5 in Table 2 show that frequency of job

Table 2 Mean, standard deviation, and correlation analysis of main variables.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------------------|----------|---------|----------|---------|----------|---------|----------|
| 1. Region | 1 | | | | | | |
| 2. Gender | -0.08*** | 1 | | | | | |
| 3. Age | -0.12*** | 0.12 | 1 | | | | |
| 4. Birthplace | 0.07** | 0.08*** | 0.02 | 1 | | | |
| 5. Work experience | -0.04 | 0.07 | 0.66*** | 0.09 | 1 | | |
| 6. Consumption level | 0.21*** | 0.05** | 0.31*** | 0.11*** | 0.25*** | 1 | |
| 7. Frequency of job mobility | 0.05* | 0.21** | -0.06** | 0.21** | 0.02 | 0.29*** | 1 |
| 8. Change of person–job match | -0.04 | 0.21*** | -0.29*** | 0.09 | -0.50*** | 0.12*** | -0.55*** |
| 9. Relationship strength | -0.03 | 0.90 | -0.01 | 0.89 | 0.02 | 0.88 | 0.01 |
| 10. Occupational heterogeneity | 0.01 | 0.27*** | -0.07** | 0.23 | -0.11*** | 0.23* | -0.09*** |
| 11. Network range | 0.02 | 0.35*** | -0.13*** | 0.35*** | -0.07** | 0.30 | 0.04 |
| 12. Return satisfaction | 0.15*** | 0.56 | -0.03 | 0.57* | -0.05* | 0.57* | 0.01 |
| 13. Environmental satisfaction | -0.02 | 0.56 | -0.03 | 0.57* | -0.02 | 0.57* | -0.02 |
| Mean | 3.62 | 0.51 | 25.44 | 2.20 | 1.50 | 2.28 | 0.54 |
| SD | 1.71 | 0.50 | 2.78 | 0.88 | 2.27 | 0.70 | 0.70 |
| N | 1348 | 1348 | 1348 | 1348 | 1348 | 1348 | 1348 |

| | 8 | 9 | 10 | 11 | 12 | 13 |
|--------------------------------|---------|---------|---------|---------|------|------|
| 8. Change of person–job match | 1 | | | | | |
| 9. Relationship strength | -0.02 | 1 | | | | |
| 10. Occupational heterogeneity | 0.11*** | -0.06** | 1 | | | |
| 11. Network range | 0.01 | -0.01 | 0.46*** | 1 | | |
| 12. Return satisfaction | 0.05* | 0.03 | -0.03 | -0.04 | 1 | |
| 13. Environmental satisfaction | 0.02 | 0.09*** | 0.13*** | 0.12*** | 0 | 1 |
| Mean | 5.19 | -0.02 | 5.14 | 32.95 | 0.00 | 0.00 |
| SD | 1.82 | 0.99 | 3.35 | 30.86 | 1.00 | 1.00 |
| N | 1348 | 1348 | 1348 | 1348 | 1348 | 1348 |

All values are rounded to two decimal places.
SD, standard deviation.
***p < 0.01, **p < 0.05, *p < 0.1.

Table 3 Regression results with job satisfaction and change of person–job match as independent variables.

| Independent | Dependent | | | | |
|----------------------------|--|--|---|---|---|
| | Model 1-1 (OLS) B coefficient Return satisfaction | Model 1-2 (OLS) B coefficient Return satisfaction | Model 1-3 (OLS) B coefficient Environment satisfaction | Model 1-4 (OLS) B coefficient Environment satisfaction | Model 1-5 (OLS) B coefficient Change of person–job match |
| Constant | -0.24 | -0.57 | 0.27 | -0.10 | 6.64*** |
| Region | 0.08*** | 0.08*** | 0 | 0.00 | -0.03 |
| Gender | -0.08 | -0.11* | -0.10* | -0.09* | 0.42*** |
| Age | 0.02 | 0.02 | -0.00 | 0.00 | -0.02 |
| Birthplace | -0.17*** | -0.18*** | -0.01 | -0.00 | 0.05 |
| Job experience | -0.03** | -0.01 | -0.01 | -0.00 | -0.38*** |
| Consumption level | -0.01 | -0.02 | -0.06 | -0.06 | -0.02 |
| Frequency of job mobility | | 0.11** | | -0.02 | -1.38*** |
| Change of person–job match | | 0.06*** | | 0.01 | - |
| Relationship strength | | 0.03 | | 0.09*** | 0.01 |
| Occupational heterogeneity | | -0.00 | | 0.02*** | 0.03** |
| Network range | | -0.00 | | 0.00** | -0.00 |
| R ² | 0.05 | 0.06 | 0.01 | 0.03 | 0.56 |
| F | 11.72*** | 7.56*** | 1.14 | 3.55*** | 167.96*** |
| N | 1348 | 1348 | 1348 | 1348 | 1348 |

All values are rounded to two decimal places.
***p < 0.01; **p < 0.05; *p < 0.1.

mobility played a significant negative role in the change of person–job match.

Meanwhile, the results of Model 1-4 in Table 3 show that the direct association of job-related social capital with environmental

satisfaction was positive and significant, but the direct association with return satisfaction was not significant. The direct association of person–job match with return satisfaction was positive and significant, whereas the direct association of the former with

Table 4 Results of the mediating mechanism analysis of social capital and change of person-job match.

| Intermediary process | Effect type | Effect value | Bootstrapped SE ^a | Bootstrapped LLCI ^a | Bootstrapped ULCI ^a | Relative effect size (%) |
|--|--|--------------|------------------------------|--------------------------------|--------------------------------|--------------------------|
| Frequency of job mobility → Change of person-job match → Return satisfaction | Total effect | 0.02 | 0.04 | -0.05 | 0.01 | |
| | Direct effect | 0.08** | 0.05 | 0.01 | 0.20 | 56.72 |
| | Mediating effect of Change of person-job match | -0.06* | 0.02 | -0.10 | -0.02 | 43.28 |
| Frequency of job mobility → Educational heterogeneity → Environment satisfaction | Total effect | -0.02 | 0.04 | -0.10 | 0.05 | |
| | Direct effect | -0.01 | 0.04 | -0.10 | 0.06 | 73.68 |
| | Mediating effect of educational heterogeneity | -0.01* | 0.00 | -0.01 | -0.00 | 26.32 |
| Educational heterogeneity → Change of person-job match → Return satisfaction | Total effect | -0.02 | 0.01 | -0.02 | 0.01 | |
| | Direct effect | -0.02 | 0.01 | -0.02 | 0.01 | 83.30 |
| | Mediating effect of Change of person-job match | 0.00* | 0.00 | 0.00 | 0.011 | 16.70 |

All values are rounded to two decimal places.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

^aBoot SE, Boot LLCI, and Boot ULCI refer to the standard error and 95% confidence of the indirect effect estimated by the deviation corrected percentile bootstrap method, respectively, the upper and lower limits of intervals.

environment satisfaction was not significant. Thus, the change of person-job match and job-related social capital likely play a mediating role in the relationship between the frequency of job mobility and job satisfaction. To avoid the possible interference of multiple mediators in the model, Process macro in SPSS was used to test the possible mediators. Only the significant indirect relationships between variables are summarised in Table 4.

Table 4 shows that the frequency of job mobility had a significant negative indirect association with job satisfaction through the change of person-job match, whereas its indirect association with environment satisfaction was not significant. Since the direct association of frequency of job mobility with job satisfaction was positive and significant ($Z = -2.56 >$ the critical absolute Sobel test value of 0.90), person-job match acted as a significant partial mediator of the relationship between frequency of job mobility and job satisfaction (Zhonglin et al., 2012); the intermediary explained 43.28% of the total effect. Meanwhile, the frequency of job mobility also played a significant negative indirect role in environment satisfaction through educational heterogeneity ($Z = -1.43 >$ the critical absolute Sobel value of 0.90), but the indirect association with return satisfaction was not significant. Moreover, because the direct association of the frequency of job mobility with environmental satisfaction was not significant, educational heterogeneity fully mediated the relationship between the frequency of job mobility and environmental satisfaction.

The serial multiple intermediary roles of change of person-job match and job-related social capital. Given the significance of the direct relationship between the frequency of job mobility and job satisfaction, it can be seen that frequency of job mobility may have an indirect association with job satisfaction through educational heterogeneity and then through the serial multiple intermediary mechanism of the change of person-job match. Therefore, a similar indirect effect analysis was used to test this possibility. One of the results showed that educational heterogeneity had a positive and indirect association with return satisfaction through the change of person-job match (see Table 4). The direct relationship between educational heterogeneity and return satisfaction was not significant. Therefore, the change in person-job match acts as a significant positive full mediator of the

relationship between educational heterogeneity and return satisfaction ($Z = 1.79 >$ the critical value of the Sobel test of 0.90). However, the main results showed that, although the serial multiple mediation mechanism was significant, its magnitude was very small, close to 0. Therefore, the serial multiple mediations showed little evidence regarding the role of job mobility frequency in job satisfaction.

Robustness test. To test the robustness of the above results, we used the ‘number of job changes’ to replace the original ‘frequency of job mobility’ and controlled the employees’ working years simultaneously, which refers to the control variable ‘work experience’ contained in the above model. In doing so, we could test whether the difference in employees’ working years may have a significant association with the original key results and the robustness of the research model.

After replacing this critical independent variable, we found that the direct association of the number of job changes with job satisfaction was no longer significant (0.02, $p = 0.62$), which means that the ‘Honeymoon Effect’ no longer exists. Among the results of the intermediation mechanism, only the intermediary role of educational heterogeneity between the number of job changes and job satisfaction was still significant ($-0.01, p = 0.06$). The remaining results were almost the same as the original ones (the complete results are presented in Supplementary Tables S1 and S2 online).

Discussion

First, the ‘Honeymoon Effect’ among knowledge-intensive employees who changed jobs frequently played a significant positive role in current job satisfaction. In the process of job hunting during the early stage of an individual’s career, when the frequency of changing jobs is high, they cannot fully understand and master their true job requirements based on job-hunting experience. However, the ‘Honeymoon Effect’ enables employees who change jobs frequently to obtain high job satisfaction in the short term (Chadi and Hetschko, 2018). Results showed that this effect played a significant role in predicting job satisfaction, which is consistent with the objective fact that job seekers in the early stages of their careers tend to focus on material returns (Duarte and Lopes, 2018). The descriptive statistical results show that

most 'floating' employees had excessive mobility; thus, frequency of job mobility had a significant positive association with job satisfaction. Therefore, the greater the frequency of job mobility, the greater the job satisfaction; thus, H1 was partially supported.

Second, the change in the person-job match and job-related social capital played a negative intermediary role in the relationship between the frequency of job mobility and job satisfaction. Knowledge-intensive employees in the early stage of their careers do not work for a long period in each new work setting because of the high frequency of their job mobility (Duarte and Lopes, 2018). They instead pursue 'visible' job outcomes, such as better pay and treatment, but do not deeply understand the gap between job requirements and their own needs. Thus, when the frequency of job mobility of knowledge-intensive employees increased, the degree to which their new job was a good match decreased. They therefore may not match a new position well. However, because of the short duration of each work setting, it is impossible for them to build effective job-related social networks, which results in an insufficient depth of accumulated social capital (Burt et al., 2018). It is futile to pursue the expansion of the breadth of social capital alone since the depth of accumulated social capital is primarily an indicator of the usefulness of social capital (Dobrev and Merluzzi, 2018). Moreover, excessive job mobility leads to many inefficient or ineffective relationships when individuals build their social networks among several work units, which in turn significantly diminishes individuals' limited energy and time, making them unable to focus more energy on maintaining and building more effective, strong relationships (Dunbar, 1998). Thus, these persons cannot effectively accumulate the corresponding job-related social capital to help them obtain higher job satisfaction (Weng and Xu, 2018). In addition, the rapid spread through social networks of having a reputation as one who frequently changes jobs is not conducive to the effective accumulation of social capital (Dobrev and Merluzzi, 2018). Finally, through its negative association with the above two variables, frequency of job mobility had a significant and negative indirect relationship with satisfaction with new jobs, even exceeding the short-term positive impact of the 'Honeymoon Effect'. This is the so-called 'masking' problem caused by the competition of the two effects that led to the overall effect being low in magnitude and, therefore, nonsignificant (Zhonglin et al., 2012). Hence, the negative and indirect relationship between the frequency of job mobility and job satisfaction through two intermediary variables cannot be ignored. In general, H2 was partially supported.

Third, job-related social capital played a significant positive direct role in the change of person-job match, which strengthened the intermediary process mentioned above. Specifically, according to the results in Table 3, considering the significant direct association of job-related social capital with the change of person-job match, the change in person-job match played a full intermediary role between job-related social capital and return satisfaction. Moreover, the direct association of frequency of job mobility with job-related social capital was negative and significant ($-0.22, P < 0.10$), which together explains and strengthens the total negative intermediary mechanism between frequency of job mobility and job satisfaction, although the serial multiple intermediation mechanism between them was not verified. Thus, H3 was not supported.

In addition, the results of the robustness test showed that the original measurement of the frequency of job mobility is rational; the difference in employees' working years will actually affect the real attributes of job mobility, which is due to an inaccurate estimation of the association of job mobility with job satisfaction from both short-term (direct association) and long-term (indirect association) perspectives. Moreover, the rest of the results were

relatively stable, which shows the robustness of our original research model.

In summary, it is important to consider the construction of social networks and the associated social capital during job transitions. This can help jobseekers find jobs that better match their own abilities and needs, which in turn will have a positive relationship with satisfaction with new jobs. These results verify the relationship between the two mediating variables and the mechanisms by which they were proposed as important drivers of job satisfaction. Even for knowledge-intensive employees, for whom human capital provides a significant competitive advantage, the accumulation of job-related social capital is important.

Implications

Theoretical implications. Based on the existing research results on employee mobility (Chadi and Hetschko, 2018; Park, 2018; Zhao et al., 2020), this study further clarifies the short-term and long-term internal mechanisms of the association of job mobility with job satisfaction. First, it verified that from a short-term perspective, excessive job mobility leads to higher job satisfaction under the background of the 'Honeymoon Effect' (Chadi and Hetschko, 2018); second, from a long-term perspective, the study expounds and explains the internal logic of the negative association of job mobility with job satisfaction from the intermediary role of job-related social capital and person-job match; finally, from the perspective of social capital theory (Yanjie et al., 2018), the strengthening mechanism of the interaction between the two mediating variables is explained. Overall, the conclusions of this paper critically analyse and verify the 'Honeymoon Effect' in job mobility from the perspective of short-term and long-term differences and expands the research framework of social capital theory application in the field of job mobility research.

Practical implications. First, employees need to maintain a reasonable frequency of job mobility between organisations (Jianping et al., 2013) and focus on the accumulation of depth of social capital during such transitions. Moreover, analysing and understanding the gap between relevant job needs and requirements for personal development and making full use of social capital to reduce the person-job mismatch brought on by information asymmetry is necessary. Second, for recruiters, in the process of talent recruitment and management, enterprises should focus on the previous work mobility experience of candidates and try to find employees with suitable mobility experience. After gaining employment, recruiters should maintain the employees' job stability by providing a good social communication environment, additional training, and promotion opportunities (Sims, 2020; Raid and Alzoubi, 2021). This facilitates expressing employee talents and maximising their benefit to the enterprise.

Limitations. We focused only on the job search behaviour of knowledge-intensive employees who were representative of early career stages. Future studies should expand the sample to verify the universality of relevant conclusions. Differences according to career stages and cultural backgrounds can also be explored.

Data availability

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

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Author contributions

Both authors contributed to the study conception, design, material preparation, and data collection. The data analysis was performed by Yang. The first draft of the manuscript was written by Yang and both authors commented on previous versions of the manuscript. Both authors read and approved the final manuscript.

Competing interests

The authors declare no competing interests.

Ethical approval

The study was performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards and was approved by the Institutional Review Board of Xi'an Jiaotong University.

Informed consent

Written informed consent was obtained from the participants with the help of their leaders, and the consent forms were collected along with the questionnaires. All participants voluntarily participated in the study after the researcher assured them of anonymity and informed them that their responses were to be used solely for academic purposes.

Additional information

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1057/s41599-023-01657-3>.

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