



Basic psychological need satisfaction and job search intensity in Chinese college students: A moderated mediation model

Lei Tang^{1,2}, Yangang Nie², Pei Chen² and Jian Mao^{2,*}

¹Vocational Counsel Centre, Guangzhou University, Guangzhou, China

²Research Center of Adolescent Psychology and Behavior, School of Education, Guangzhou University, Guangzhou, China

*Correspondence: Jian Mao, 1112308001@e.gzhu.edu.cn

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Abstract: Based on self-determination theory, this study examined how basic psychological need satisfaction influenced job search intensity among Chinese graduating college students. A two-wave longitudinal survey was conducted with a sample of 244 graduating students (50.4% female; mean age = 21.44 years, SD = 0.85). Data were collected using the Basic Psychological Need Satisfaction and Frustration Scale, the Goal Orientation Scale, the College Students' Job Search Stress Scale, and the Job Search Behavior Scale. The results showed that higher basic psychological need satisfaction predicted greater job search intensity, and this relationship was partially mediated by stronger mastery goal orientation. However, the positive association was weakened under conditions of high job search stress. These findings highlight the interplay between internal motivation and external stress in shaping job search behavior, extending our understanding of the drivers of job-searching efforts and offering practical implications for supporting students during the transition to employment.

Keywords: Job search intensity; basic psychological need satisfaction; mastery goal orientation; job search stress; college students

Introduction

Employment success provides individuals not only with economic support but also serves as a critical foundation for acquiring a sense of meaning, constructing identity and social status, and developing their careers (Van Hooft et al., 2021). In previous studies, job search intensity was considered an important prerequisite for employment success (Van den Hee et al., 2020). Research showed that job search intensity was more strongly associated with employment outcomes among new labor market entrants, such as college graduates, than among unemployed adults (Van Hooft et al., 2021). Since college students are at a pivotal stage of socialization and career entry (Zhong & Xu, 2023), understanding how to promote their job search intensity is crucial.

Job search is fundamentally a complex, difficult, stressful, and goal-oriented self-regulatory process (Van den Hee et al., 2020; Van Hooft et al., 2021; PM & Joshy, 2023), influenced by intrinsic motivation, external environmental factors and cultural context (Bandura, 2002). The satisfaction of basic psychological needs—namely autonomy, competence, and relatedness—plays a foundational role in motivating behavior (Deci & Ryan, 2000; Sheldon, 2011). For college graduates who are newly entering the labor market and seeking their first full-time job, job searching also constitutes a learning process (PM & Joshy, 2023). Therefore, satisfaction of psychological needs may promote stronger mastery goal orientation, which in turn enhances job search intensity. Simultaneously, external factors such as perceived job search stress may further shape this self-regulatory process (Tang & Sun, 2021). Nevertheless, few studies have examined how basic

psychological needs influence job search behavior. Even fewer have integrated internal needs, motivations, stress and behavior into a unified framework, especially for college students in a Chinese cultural context. This study aims to address that gap.

Basic psychological need satisfaction and job search intensity

Basic psychological needs refers to the three innate and fundamental psychological requirements: autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2020). The need for autonomy reflects an individual's desire for volition and a sense of choice in their actions. The need for competence involves the desire to feel effective and capable in one's activities. The need for relatedness pertains to the desire to connect with others and experience a sense of belonging (Deci & Ryan, 2000; Ryan & Deci, 2017). Scholars have argued that the satisfaction of these needs is strongly associated with positive outcomes (Van den Broeck et al., 2016; Van der Vaart et al., 2020). Empirical research further supports this view; for example, Kawasaki (2019) found that basic psychological need satisfaction was significantly positively correlated with employees' positive work behaviors.

Job search intensity denotes the amount of time, effort, and number of activities invested in the job search process (Wanberg et al., 2020). As a key dimension of job search behavior, it is an important prerequisite for employment success (Van Hooft et al., 2021) and reflects positive job search efforts among college students. Therefore, satisfaction of basic psychological needs is likely to be positively associated with job search intensity in this population.



Satisfaction of the need for competence is often linked to higher self-efficacy. Satisfaction of the need for relatedness implies that individuals have received social support and developed quality relationships. Satisfaction of the need for autonomy indicates that individuals feel in control and freely choose their actions (Van den Broeck et al., 2016; Van der Vaart et al., 2020). Meta-analytic evidence has shown that self-efficacy and social support are significant predictors of job search intensity (Kanfer et al., 2001; Van Hooft et al., 2021). In a Chinese context, Wang and Qu (2022) conducted a cross-sectional study with graduating undergraduates and found that social support positively correlated with job search behaviors, including intensity. Although direct studies on autonomy need satisfaction and job search intensity are relatively scarce, the sense of volition experienced by individuals with high autonomy satisfaction may originate from experienced autonomy. Koen et al. (2016) reported in a cross-sectional study that experienced autonomy was positively correlated with job search intensity. Taken together, satisfaction of basic psychological needs in all dimensions is likely to be positively associated with the job search intensity among college students.

Mediating role of mastery goal orientation

Mastery goal orientation is the intrinsic motivation that drive individuals to enhance their abilities and acquire new skills (Wang & Yan, 2018; Endres & Eitel, 2024). It is also termed learning goal orientation and constitutes a core dimension within achievement goal frameworks. Achievement goals are commonly classified in either a three-dimensional framework (mastery, performance-approach, performance-avoidance; Elliot, 2005; Endres & Eitel, 2024; Wang & Yan, 2018) or a four-dimensional framework (mastery-approach, mastery-avoidance, performance-approach, performance-avoidance; Elliot & McGregor, 2001; Liu et al., 2024). Because this study aims to capture individuals' overall motivation to learn and master tasks, we adopt the three-dimensional framework and focus specifically on mastery goal orientation.

Previous research results have shown that mastery goal orientation was significantly correlated with basic psychological need satisfaction or job search intensity. For example, in a cross-sectional study on German teachers, Janke et al. (2015) found that perceived satisfaction of the basic psychological needs positively correlated with the work-related learning goal orientation. Similarly, Wang and Yan (2018) reported a positive association between mastery goal orientation and job search intensity among Chinese senior university students. Experimental evidence also supports this link: Van Hooft and Noordzij (2009) revealed that a learning goal orientation workshop enhanced the job search behavior among unemployed job seekers.

Although the role of mastery goal orientation between need satisfaction and job search behavior remains underexplored, some related evidence indicated that mastery goal orientation was the mediator between other variables and individual behavior. For instance, PM and Joshy (2023) found that learning goal orientation mediated the relationship between perceived employability and job search

behavior among Indian master's students in the preparatory job-search stage. Likewise, Kumar et al. (2022) reported that mastery goal orientation mediated the link between psychological capital and innovative behavior among hotel employees. Building on these findings, mastery goal orientation is likely to be the mediator between basic psychological need satisfaction and job search intensity.

The moderating role of job search stress

Setbacks and distractions within the social environment can undermine job seekers' intrinsic motivation (Van den Hee et al., 2020). For graduating college students, job search stress reflects a psychological response to difficulties and uncertainties in the employment environment (Tang & Sun, 2021). This stress may act as an external motivator and affect intrinsic motivation for job searching (Ryan et al., 2021). Supporting this view, Sortheix et al. (2019) found that young people in Europe under the pressure of the economic crisis reduced intrinsic motivations such as self-motivation and self-orientation. Thus, job search stress may moderate the relation between basic psychological need satisfaction and mastery goal orientation.

Theoretical foundations

The Self-Determination Theory (SDT) posits that the inherent tendency of individuals to satisfy their basic psychological needs can stimulate their intrinsic motivation, which in turn influences their behavior (Deci & Ryan, 2000). Job search intensity is the operational definition of job search behavior in most existed studies (Van den Hee et al., 2020), and mastery goal orientation is an important intrinsic motivation (Wang & Yan, 2018; Endres & Eitel, 2024). According to SDT, basic psychological needs can stimulate mastery goal orientation—an inherent drive to seek challenge, exercise capabilities, and acquire new skills—thereby promoting greater job search intensity.

SDT also emphasizes that the social environment influences the extent to which individuals can realize their self-determination potential (Deci & Ryan, 2000; Sheldon, 2011). Job search stress reflects the various difficulties and setbacks that college students encounter during their job search. As an environmental stressor, it may weaken the motivational pathway from need satisfaction to mastery goal orientation. Therefore, job search stress is likely to moderate the process by which basic psychological need satisfaction effect job search intensity through mastery goal orientation.

Study context

In China, with the increasing number of college graduates due to the expansion of higher education, and the adverse impact of the COVID-19 pandemic on the economy, college students face difficulties in finding jobs (Li, 2023). And the job search stress of Chinese college students has significantly increased (Tang & Sun, 2021). Despite this pressure, evidence suggests that job search intensity remains relatively low in this population (Li, 2020; Zhong & Xu, 2023), highlighting the need to better understand the factors that influence their job search behavior. Many Chinese graduates struggle to secure positions in desirable

companies within today's competitive labor market (Hai et al., 2024), which may undermine their sense of competence. Furthermore, most of these students were born after 2000, during China's one-child policy era. Many experienced excessive parental care yet limited autonomy. Later, with the implementation of the two-child (2016) and three-child (2021) policies, first-born children often received less parental attention and support (Qi et al., 2025). Such shift may have weakened their sense of relatedness and psychological security (Wu et al., 2021). Thus, the satisfaction of the basic psychological needs among Chinese college students is likely to be a complex and multifaceted issue.

The intrinsic motivation to seek jobs may also be complex in the Chinese context. Traditional cultural expectations—such as fulfilling family obligations, maintaining social status (*mianzi*), and pursuing stable careers—continue to shape young people's job-search motives. At the same time, contemporary college students are increasingly influenced by globalization and evolving values, which emphasize personal growth, intellectual satisfaction, and skill development (Zhu et al., 2023). These latter motives align closely with mastery goal orientation, which reflects the desire to improve one's competence and acquire new skills (Wang & Yan, 2018; Endres & Eitel, 2024).

Given the relatively low job search intensity, high job search stress, and the complex interplay of basic psychological need satisfaction and intrinsic motivation among Chinese college students, it is important to examine—within the Chinese context—how basic psychological need satisfaction influences job search intensity through internal motivation, as well as how job search stress may moderate these relationships.

Goals of the study

The present study examines the relationships between basic psychological need satisfaction and job search intensity, with mastery goal orientation as a mediator and job search stress as a moderator. Figure 1 presents the study's conceptual model. Based on this model, we propose the following hypotheses among college students for testing. By integrating internal psychological needs and external contextual stress into one model, this study offers a more comprehensive understanding of how internal motivation and external motivation jointly shape job search behavior. It extends existing SDT applications to the job search domain in a non-Western context and contributes to the literature by highlighting both motivational pathways and boundary conditions.

Hypothesis 1: The total score and various dimensions of basic psychological need satisfaction relate positively to job search intensity.

Hypothesis 2: Mastery goal orientation mediates the relationship between basic psychological need satisfaction and job search intensity, such that higher basic psychological need satisfaction increases mastery goal orientation, which in turn increases job search intensity.

Hypothesis 3: Job search stress moderates the first half of the path of the mediating model of “Basic psychological need satisfaction → mastery goal orientation → job search intensity”, such that job search stress weakens the

relationship between basic psychological need satisfaction and mastery goal orientation.

Methods

Participants and setting

Given Guangdong Province's leading role in China's economic reform and openness, college students in this region are generally more exposed to global trends and contemporary culture. Using a convenience sampling approach, we conducted a two-wave survey during the peak autumn recruitment period (late September to late October 2024) among final-year undergraduates actively seeking employment. Participants were recruited from two universities in Guangdong: one located in the economically developed metropolitan area of Guangzhou, and the other in the less developed, more remote region of Zhanjiang. Convenience sampling was deemed appropriate as it allowed efficient access to a clearly defined target population within a limited recruitment window—a common practice in behavioral and educational research (Etikan et al., 2016).

At Time 1, 397 respondents completed measures of basic psychological need satisfaction, mastery goal orientation, job search stress, and demographic variables. After removing carelessly answered responses, 381 valid questionnaires were retained. One month later (Time 2), the same 381 students were invited to complete the job search intensity scale. A total of 269 responses were received (response rate = 70.60%), which is consistent with rates reported in similar longitudinal studies on job search behavior (Van den Hee et al., 2020). We further excluded 25 participants who had already secured a job at Time 1, resulting in a final sample of 244 students (valid response rate = 90.71%).

The sample's ages ranged from 19 to 26 years old, with an average age of 21.44 ± 0.85 years old. Among them, 49.6% were male ($n = 121$) and 50.4% were female ($n = 123$). The majority identified as Han Chinese (98.77%), with 1.23% belonging to other ethnic groups. In terms of major, 6.1% were in humanities and social sciences ($n = 15$), 9.0% in science ($n = 22$), 23.0% in engineering ($n = 56$), and 61.5% in sports and arts ($n = 150$). Geographically, 30.3% ($n = 74$) studied in Guangzhou and 69.7% ($n = 170$) in Zhanjiang.

Measures

Basic psychological need satisfaction

At time 1, participants reported their basic psychological need satisfaction using the 12-item Basic Psychological Need Satisfaction Subscale. This subscale was derived from the Chinese version of the Basic Psychological Need Satisfaction and Frustration Scale, adapted by Zhang (2023) based on Phuoc (2020). It comprises three dimensions: satisfaction of needs for competency, satisfaction of needs for relatedness, and satisfaction of needs for autonomy. An example item is: “I can do things very well.” Responses were recorded on a 5-point Likert scale ranging from 1 (very inconsistent) to 5 (very consistent). Each dimension consists of 4 items. A higher total score for a dimension indicates a greater degree of satisfaction in that area. In this study, the overall Cronbach's α for the

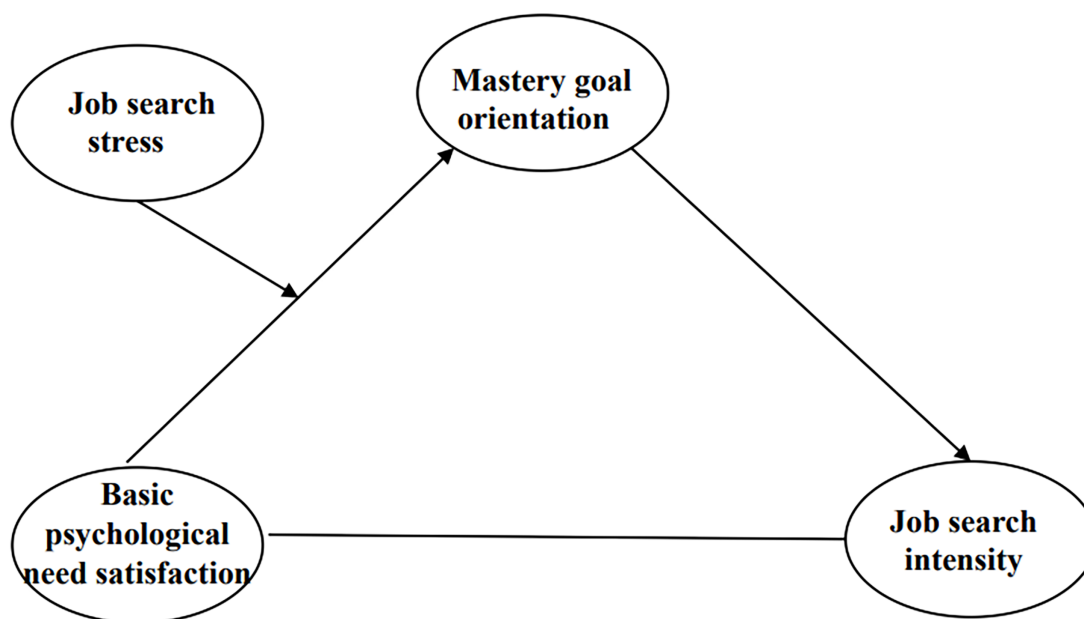


Figure 1. Hypothesized model

subscale was 0.92. The Cronbach's α for the three dimensions were: autonomy need satisfaction (0.90), relatedness need satisfaction (0.83), and competence need satisfaction (0.88).

Mastery goal orientation

At Time 1, mastery goal orientation was measured using the 5-item Learning Goal Orientation subscale from the Goal Orientation Scale (VandeWalle, 1997). An example item is: "I often seek opportunities to acquire new knowledge and skills." Items were rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating stronger mastery goal orientation. In this study, the scale's Cronbach's α was 0.91.

Job search stress

At Time 1, job search stress was assessed with the 20-item College Students' Job Search Stress Scale (Tang & Sun, 2021). An example item is: "The thought of searching for a job makes me feel anxious and nervous, and I tend to get upset and impatient." Responses were given on a 5-point Likert scale ranging from 1 (no stress) to 5 (great stress), with higher scores indicating greater job search stress. The Cronbach's α in this study was 0.93.

Job search intensity

At Time 2, job search intensity was measured using the one-dimensional Job Search Behavior Scale (Stevenor & Zickar, 2022). The original 20-item scale was adapted to better reflect the job-search channels available to Chinese college students. Two items were removed ("Read the help-wanted/classified ads in a newspaper, journal, or professional association" and "List myself as a job applicant in a newspaper, journal, or professional association"). Three of the remaining 18 items were reworded for local relevance (e.g., "Use current within company resources (e.g., colleagues) to generate potential job leads" was revised to "Use current within-organization resources

(e.g., colleagues, teachers, classmates, alumni) to generate potential job leads", "Telephone a prospective employer" was revised to "Contact prospective employers by phone or email or wechat", "Contact an employment agency, executive search firm, or state employment service" was revised to "Contact an employment agency, executive search firm, talent market, college employment department, or state employment service, to get employment information and help"). Participants rated each item on a 5-point scale from 1 (never, 0 times) to 5 (very frequent, ≥ 10 times), with higher scores indicating more frequent job search behavior. Confirmatory factor analysis showed acceptable fit for the adapted scale: $\chi^2/df = 2.72$, CFI = 0.90, TLI = 0.89, SRMR = 0.05, RMSEA = 0.08). Although RMSEA is not less than 0.08, we placed greater reliance on SRMR, as RMSEA is often more likely to misjudge a poor fit than SRMR (Shi et al., 2020). The Cronbach's α was 0.97 for the original scale and 0.96 for the revised 18-item version in this study.

Control variables

Based on the results of Pearson's bivariate correlation analysis, we included major and grade point average as control variables, as they showed significant correlations with the mediator and the dependent variable, respectively.

Procedure

This study was conducted under the ethical standards set forth in the 2013 Helsinki Declaration and complied with the ethical regulations of the Ethics Review Committee of Education School, Guangzhou University (Ethics No. GZHU202315). All participants provided orally informed consent prior to their inclusion in the study.

Data analyses

We used SPSS 25.0 to perform Harman's single-factor test for common method bias, and to conduct descriptive statistics and Pearson bivariate correlations among

the variables. Mplus 8.0 was employed for the following analyses: First, to improve model fit and reduce random error, the 5 mastery goal orientation items were packaged into 3 indicators using the balancing method, and the 18 job search intensity items were similarly packaged into 3 indicators. Second, a latent mediation structural equation model was estimated with maximum likelihood to test the mediating role of mastery goal orientation between basic psychological need satisfaction and job search intensity. Third, a latent moderated structural equation model was used to examine the moderation effect of job search stress. Fourth, simple slope analysis was conducted to further probe the interaction pattern. All indirect, direct, and moderation effects were evaluated using a bootstrapping procedure with 1000 resamples and 95% bias-corrected confidence intervals (CI). Effects were considered statistically significant if the 95% CI did not include zero.

Results

Common method bias

Since the data were self-reported, common method bias was a potential concern (Podsakoff et al., 2003). We performed Harman's single-factor test on the items measured at Time 1. The results showed that the first unrotated factor explained 22.64% of the variance, which was below the 40% threshold. Thus, common method bias was not a significant issue in this study.

Descriptive statistics and correlation analysis

Descriptive statistics and correlations among the study variables are presented in Table 1. Basic psychological need satisfaction (and its sub-dimensions) at Time 1 showed positive correlations with job search intensity at Time 2, supporting Hypothesis 1. These results suggest that higher satisfaction of college students' basic psychological needs is associated with more active job search behavior. Mastery goal orientation (Time 1) was positively correlated with basic psychological need satisfaction (and its sub-dimensions) as well as with job search intensity (Time 2). Job search stress (Time 1) was only negatively correlated with basic psychological need satisfaction (and its sub-dimensions). These correlation patterns provide preliminary support for conducting mediation and moderated-mediation analyses.

Mastery goal orientation mediation

The latent mediated structural equation model demonstrated good fit to the data: $\chi^2/df = 2.11$, CFI = 0.98, TLI = 0.97, RMSEA = 0.07, SRMR = 0.04. Path analysis results are shown in Figure 2. Specifically, basic psychological need satisfaction at Time 1 was positively related to mastery goal orientation at Time 1 ($\beta = 0.45$, SE = 0.09, $p < 0.001$) and job search intensity at Time 2 ($\beta = 0.20$, SE = 0.07, $p = 0.005$). Mastery goal orientation at Time 1 was also positively related to job search intensity at Time 2 ($\beta = 0.28$, SE = 0.07, $p < 0.001$). A bias-corrected non-parametric percentile bootstrap test indicated a significant mediation effect of mastery goal orientation between basic psychological need satisfaction and job search intensity ($\beta = 0.13$, SE = 0.04, 95%CI = [0.07, 0.22]). This indirect

effect accounted for 39.39% of the total effect, supporting a partial mediation. Thus, Hypothesis 2 was supported.

Job search stress moderation

Building on the mediation model, we next tested whether job search stress moderated the relationship between basic psychological need satisfaction and mastery goal orientation using latent moderated structural equation modeling (Fang & Wen, 2018).

First, a baseline mediation model that included the latent moderator (job search stress) was estimated. The model showed good fit: $\chi^2/df = 2.03$, CFI = 0.97, TLI = 0.96, RMSEA = 0.07, SRMR = 0.06, AIC = 6753.32, Log-Likelihood = -3332.66.

Next, the latent interaction term (Basic psychological need satisfaction \times Job search stress) was added to create a moderated mediation model (Figure 3). Compared to the baseline model, the moderated mediation model showed improved fit: a lower AIC (6081.96, $\Delta = -671.36$), an higher log-likelihood (-2996.98, $\Delta = +335.68$), and a reduction of 2 degrees of freedom. A Chi-square difference test based on the log-likelihood ratio was significant ($p < 0.05$), confirming the superiority of the moderated mediation model.

The moderated mediation effect was tested using the product of coefficients approach. The product of path a3 (Basic psychological need satisfaction \rightarrow Mastery goal orientation) and path b (Mastery goal orientation \rightarrow Job search intensity) was significant ($\beta = -0.07$, SE = 0.03, 95%CI = [-0.15, -0.03], $p = 0.02$). This indicates that job search stress significantly moderated the first stage of the mediation path. Therefore, Hypothesis 3 was supported.

The mediation effect is given by $(a1 + a3 \times \text{Job search stress}) \times b = (0.54 - 0.27 \times \text{Job search stress}) \times 0.27$. This shows that the indirect effect of mastery goal orientation decreased as the job search stress increased.

When job search stress was high (+1SD), the mediation effect was only marginally significant ($\beta = 0.07$, SE = 0.04, 95%CI = [0.001, 0.18], $p = 0.10$). When job search stress was low (-1SD), the mediation effect was significant ($\beta = 0.22$, SE = 0.07, 95%CI = [0.12, 0.38], $p = 0.001$). The difference between these conditional indirect effects was significant ($\beta = -0.15$, SE = 0.06, 95%CI = [-0.29, -0.05], $p = 0.02$).

Simple slope analysis (Figure 4) further illustrated this moderation. For students with low job search stress (-1SD), the relationship between basic psychological need satisfaction and mastery goal orientation was positive and significant ($\beta = 0.82$, SE = 0.15, 95%CI = [0.54, 1.12], $p < 0.001$). For students with high job search stress (+1SD), this relationship was not significant ($\beta = 0.27$, SE = 0.16, 95%CI = [-0.04, 0.60], $p = 0.10$). The difference between these slopes was significant ($\beta = -0.55$, SE = 0.16, 95%CI = [-0.90, -0.26], $p = 0.001$).

In summary, the moderated mediation results indicated that basic psychological need satisfaction promoted job search intensity through mastery goal orientation only when job search stress was low. When job search stress was high, this motivating pathway was effectively blocked.

Table 1. Descriptive statistics and correlations

Variable	M	SD	1	2	3	4	5	6	7	8
Control variables										
1. Major ^a	4.39	0.92	–							
2. Grade point average	3.43	0.41	0.07	–						
Time 1 variables										
3. Basic psychological need satisfaction	3.81	0.65	0.10	0.04	–					
4. The satisfaction of needs for autonomy	3.84	0.69	0.12	–0.01	0.86***	–				
5. The satisfaction of needs for relatedness	3.90	0.83	0.06	0.08	0.86***	0.60***	–			
6. The satisfaction of needs for competence	3.70	0.76	0.08	0.04	0.86***	0.65***	0.58***	–		
7. Mastery goal orientation	3.66	0.74	0.23***	0.03	0.39***	0.29***	0.27***	0.45***	–	
8. Job search stress	3.34	0.65	–0.12	–0.07	–0.22***	–0.24***	–0.14*	–0.21**	–0.07	–
Time 2 variable										
9. Job search intensity	2.66	0.83	0.11	0.19**	0.30***	0.27***	0.20**	0.30***	0.36***	–0.10

Note. *N* = 244. ^a1 = Majors related to economics and management; 2 = Majors related to humanities and social sciences; 3 = Majors related to science; 4 = Engineering majors; 5 = Majors related to art and sports. **p* < 0.05, ***p* < 0.01, ****p* < 0.001 (2-tailed).

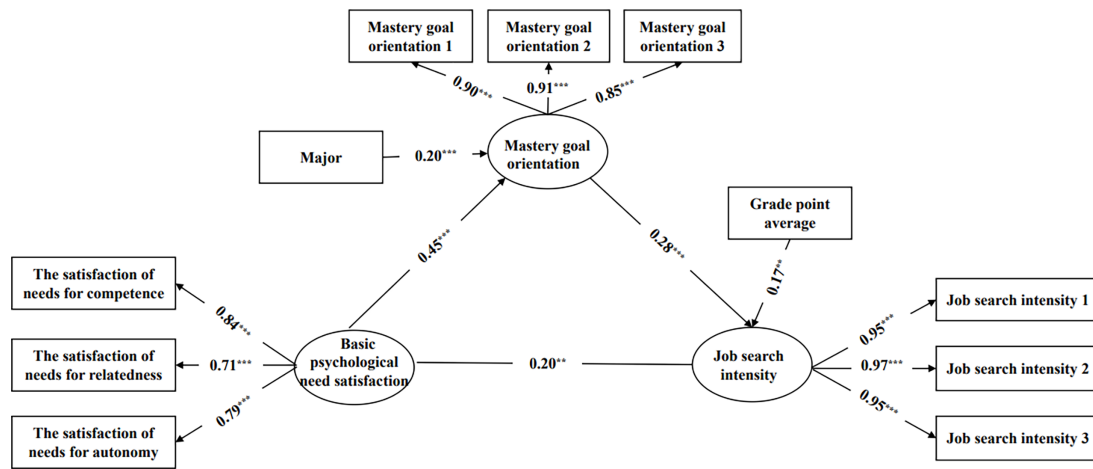


Figure 2. The mediating effect of mastery goal orientation between basic psychological need satisfaction and job search intensity. Note. *N* = 244. ***p* < 0.01, ****p* < 0.001 (2-tailed).

Discussion

In China, graduating college students often face challenges in satisfying their needs for autonomy, competence, and relatedness, due to shifting family-planning policies and a highly competitive job market. Nevertheless, our findings demonstrated that basic psychological need satisfaction was positively associated with job search intensity. This supports SDT, which holds that need satisfaction promotes adaptive behavior and positive outcomes (Deci & Ryan, 2000; Van den Broeck et al., 2016; Van der Vaart et al., 2020). The result is also consistent with prior evidence that psychological need satisfaction fostered proactive workplace conduct (Kawasaki, 2019).

Job search involves goal setting, preparation, and active tasks such as submitting résumés and attending interviews. Individuals with higher autonomy satisfaction are more likely to view these activities as self-directed rather than externally imposed. This sense of volition enhances intrinsic motivation and increases behavioral engagement (Koen et al., 2016). Similarly, competence satisfaction builds confidence in one’s ability to perform job-search tasks and raises expectations of future success. Such confidence strengthens motivation and sustains effort, encouraging individuals to actively seek opportunities, refine their applications, and engage with potential employers.

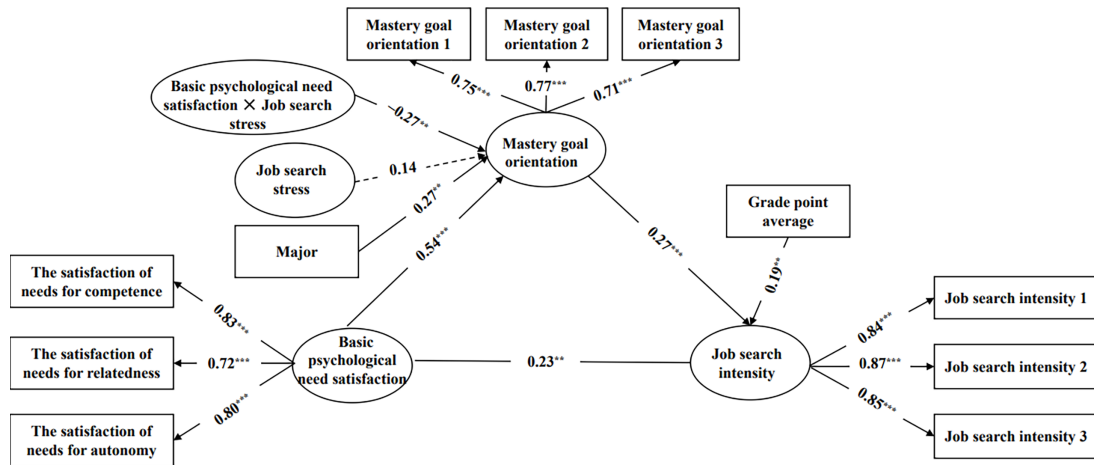


Figure 3. The mediation model moderated by job search pressure. Note. $N = 244$. $**p < 0.01$, $***p < 0.001$ (2-tailed).

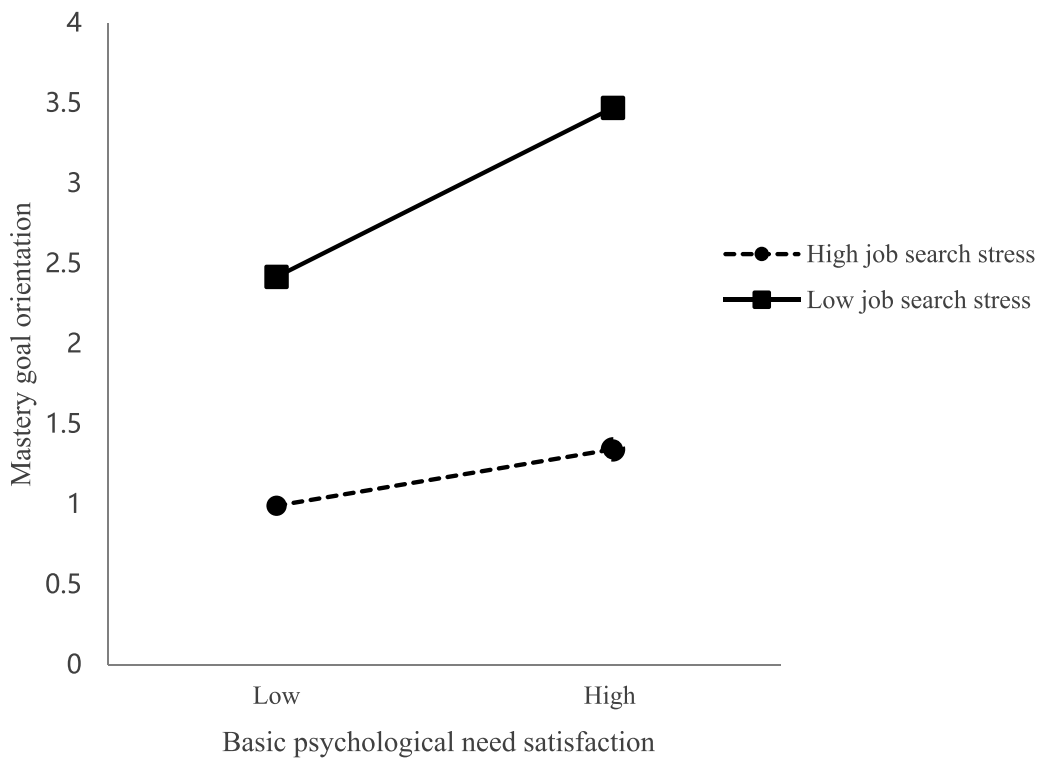


Figure 4. The moderating role of job search stress between basic psychological need satisfaction and mastery goal orientation. Note. $N = 244$.

While SDT traditionally highlights autonomy and competence as primary drivers of self-regulated behavior (Ryan et al., 2021), our study reveals that relatedness satisfaction also plays a substantial role. In Chinese Confucian culture, interpersonal harmony and collective expectations are highly valued. Individuals who feel connected to their support networks may be more motivated to meet social expectations and reciprocate the support they receive (Zhou et al., 2023). Moreover, job seekers with higher relatedness satisfaction experience stronger emotional ties to those who support them (Van der Vaart et al., 2020). This connection can buffer against ego depletion during prolonged search periods (Johnson & Leo, 2020), thereby promoting greater persistence.

Furthermore, mastery goal orientation mediated the relationship between basic psychological need satisfaction and job search intensity. This aligns with the SDT view that basic psychological needs shape behavioral goals, which in turn influence behavior (Deci & Ryan, 2000). In China, both traditional and modern cultural forces shape students’ job-search motivations. Traditional values emphasize obedience, filial piety, collectivism, and stable employment that provides social status and family security. Yet globalization has increased labor mobility and job insecurity, leading many students to prioritize personal adaptability and skill development (Zhu et al., 2023).

For undergraduates newly entering the labor market, job search is not only a goal-directed process but also a key learning experience (PM & Joshy, 2023). When

basic psychological needs are satisfied, job seekers tend to feel more autonomous, competent, and socially supported. These perceptions enhance intrinsic motivation for growth, thereby elevating mastery goal orientation. Individuals with higher mastery orientation are more likely to engage in challenging tasks (Wang & Yan, 2018), adopt exploratory strategies (e.g., seeking diverse or unfamiliar opportunities), and intensify job search behaviors (Affum-Osei & Chan, 2024). They also tend to interpret setbacks as feedback rather than failure, using them to adjust their approach and persist (Van Hooft & Noordzij, 2009; Kumar et al., 2022).

As autonomy, competence, and relatedness are interrelated (Janke et al., 2015), we examined their individual and combined effects. Autonomy and competence satisfaction both positively predicted mastery goal orientation, consistent with prior findings on learning motivation (Janke et al., 2015). Notably, relatedness satisfaction showed a similarly strong association. This expands prior research by highlighting the motivational significance of relatedness, which has received less attention in SDT literature. In Chinese culture, the emphasis on social connection and relational harmony may amplify the role of relatedness. Students who feel emotionally supported often experience greater psychological security (Wu et al., 2021), which may encourage them to pursue self-improvement and engage in learning-oriented job search behaviors.

Finally, job search stress moderated the first stage of the mediation pathway—the link between basic psychological need satisfaction and mastery goal orientation. Even when psychological needs are met, high stress in a difficult employment climate can dampen intrinsic motivation for growth and learning. Shah et al. (2012) pointed out that scarcity led people to engage more deeply in some problems while neglecting others. Students who perceive high job search stress often struggle in the job market and find it hard to secure desirable positions (Tang & Sun, 2021). As the prime job-search period winds down, securing any paid job becomes urgent. These individuals may concentrate on “getting a job first”, consuming attentional resources and inducing cognitive fatigue. Consequently, they are less able to focus on the intrinsic learning and growth aspects of the search process.

Moreover, individuals with low mastery goal orientation tend to employ random, trial-and-error strategies during their job search (Affum-Osei & Chan, 2024). This further depletes self-regulatory resources and reduces behavioral persistence (Kumar et al., 2022). In contrast, students with lower job search stress typically receive better market feedback in the job and have more opportunities. They remain motivated to invest time and energy in pursuing roles that offer skill development and ability improvement.

Theoretical and practical implications

This study offers several theoretical and practical contributions. Theoretically, first, we confirm that satisfaction of the needs for autonomy, competence, and relatedness significantly predicts job search behavior. This provides a deeper explanation for why some individuals engage more actively in job searching, extending the application of SDT

to the job-search context. Second, the research clarifies the psychological mechanism linking need satisfaction to job search behavior. Mastery goal orientation serves as a key mediator, bridging SDT’s motivational processes with goal-setting mechanisms from Achievement Goal Theory. By incorporating job search stress as a moderator, we further reveal how external environmental factors can weaken the pathway from need satisfaction to goal orientation. This integrated model connects internal motivation with goal-directed behavior and specifies boundary conditions, offering a more dynamic view of job-search self-regulation. Third, by focusing on graduating college students, the study complements existed literature that has predominantly examined unemployed adults or employed workers. Finally, the longitudinal design strengthens the temporal inferences of our findings.

Practically, grounded in SDT, several recommendations can be offered to support students’ job-search efforts. Universities and families should encourage students’ autonomy by respecting their independent career decisions and minimizing controlling interventions. To enhance competence, universities should provide training in résumé writing, interview skills, and information-seeking strategies, while using constructive feedback to build students’ confidence. Peer networks, mentoring programs, and positive faculty-student relationships should be fostered to satisfy students’ relatedness needs and sustain their motivation. Given the moderating role of job search stress, institutions and policymakers should offer emotional support and reduce external pressures by providing clear employment information and appropriate incentives. Together, these measures can help maintain students’ intrinsic motivation, strengthen their mastery orientation, and ultimately promote more proactive and persistent job search behaviors.

Limitations and future directions

Our study has certain limitations. First, the sample consisted only of graduating students from universities in Guangzhou and Zhanjiang. This may limit the representativeness of the findings for new job seekers across China. Future studies could include graduates from more regions and with diverse educational backgrounds to improve sample representativeness. Expanding the research to other job-seeker groups (e.g., unemployed job seekers and job-hopping job seekers) would also strengthen the generalizability of the results. Second, all measures were based on self-report scales, and data were collected at only two time points. These features constrain causal interpretation. Future research could employ multi-method designs (e.g., combining self-reports with behavioral measures or field experiments) and collect data across multiple time points to better examine causal relationships.

Conclusion

Few studies have examined the predictors of college students’ job search intensity by integrating the satisfaction of the three basic psychological needs. Grounded in SDT, this two-wave longitudinal study investigated the mechanism linking basic psychological need satisfaction with job search intensity. Findings indicate that

satisfaction of the needs for autonomy, competence, and relatedness positively predicts job search intensity. Mastery goal orientation serves as a key mediator, effectively translating intrinsic motivation into job search behavior. Furthermore, job search stress moderates the relationship between psychological need satisfaction and mastery goal orientation, revealing how external pressures weaken intrinsic motivation processes. By extending SDT to the job-search context, this study advances our understanding of how internal needs and external stressors jointly shape graduating students' motivation and persistence. These findings offer theoretical insights and practical guidance for facilitating graduates' transition into the workforce, underscoring the value of nurturing intrinsic motivation while mitigating environmental pressures.

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