

The More Underutilized, the Less Passionate? The Impact of Employee Perceived Overqualifi- cation on Work Passion

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Abstract

Based on self-concept theory, this study examines the nonlinear effects of perceived overqualification on employees' work passion. Through analyzing paired questionnaire data from 856 employees and their immediate supervisors at a large state-owned bank across four time points, the findings reveal: (1) an inverted U-shaped relationship exists between perceived overqualification and perceived relative job advantage; (2) perceived performance appraisal fairness negatively moderates the curvilinear relationship between perceived overqualification and perceived relative job advantage; (3) perceived relative job advantage is positively correlated with employees' harmonious work passion and obsessive work passion; (4) a nonlinear mediated moderation effect exists, wherein the interaction between employees' perceived overqualification and perceived performance appraisal fairness indirectly influences harmonious work passion and obsessive work passion through perceived relative job advantage; (5) leader's work meaning assignment positively moderates the relationship between perceived relative job advantage and work passion; and (6) harmonious work passion is positively correlated with employees' in-role performance and extra-role performance. The research findings not only enrich the relevant literature on perceived overqualification but also provide managerial implications for enterprises responding to the national advocacy for high-quality and full employment.

Full Text

Underused Skills, Lost Drive? The Impact of Employees' Perceived Overqualification on Work Passion

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Abstract

Drawing on self-concept theory, this study examines the nonlinear effect of perceived overqualification on employees' work passion. Through analysis of paired questionnaire data from 856 employees and their direct supervisors across four time points at a large state-owned bank, we find: (1) an inverted U-shaped relationship between perceived overqualification and perceived relative job advantage; (2) perceived justice of performance evaluation negatively moderates this curvilinear relationship; (3) perceived relative job advantage positively correlates with both harmonious work passion and obsessive work passion; (4) a nonlinear mediated moderation effect exists, whereby the interactive effect of perceived overqualification and perceived justice of performance evaluation indirectly influences harmonious and obsessive work passion through perceived relative job advantage; (5) leader enhancement of work meaningfulness positively moderates the relationship between perceived relative job advantage and work passion; and (6) harmonious work passion positively correlates with both in-role and extra-role performance. These findings enrich overqualification research and offer managerial insights for organizations responding to national initiatives for high-quality, full employment.

Keywords: perceived overqualification, perceived relative job advantage, work passion, perceived justice of performance evaluation, leader enhancement of work meaningfulness

1. Introduction

The 20th National Congress of the Communist Party of China report states: "Employment is the most fundamental aspect of people's livelihood. We must strengthen pro-employment policies, improve employment promotion mechanisms, and foster high-quality, full employment." However, as higher education becomes increasingly accessible and employment competition intensifies, more highly educated and experienced workers are taking jobs below their actual capabilities, creating a phenomenon of "big fish in small ponds." Reports indicate that only 39.7% of workers in China's labor market have education levels that match their job requirements. Data from major domestic online recruitment platforms show that approximately half of job seekers have educational qualifications exceeding position requirements (Zheng et al., 2021). This social phenomenon is termed overqualification—when employees' education, experience, knowledge, skills, and abilities exceed job demands (Maynard et al., 2006). When employees perceive such a mismatch, it is called perceived overqualification (Johnson & Johnson, 1996; Liao et al., 2024; Zhang et al., 2023).

Perceived overqualification has attracted widespread scholarly attention. Most

research from the person-job misfit perspective has explored its negative effects, such as increased work alienation (Cao & Wei, 2022), sense of meaninglessness (Liu et al., 2025), reduced organizational citizenship behavior (Chen et al., 2017; Li et al., 2022), knowledge sharing (Kong et al., 2025), innovative behavior (Li & Chen, 2022), and job performance (Ding et al., 2022). Some studies have begun examining the “bright side” of perceived overqualification, finding it can enhance proactive work behavior (Deng et al., 2018; Peng et al., 2023), knowledge sharing intentions (Li et al., 2025), voice behavior (Zhou et al., 2020), and performance (Ma et al., 2023; Zhang et al., 2021). Beyond these frequently studied outcomes, recent research has begun exploring the impact of perceived overqualification on work passion (e.g., Cheng et al., 2021; Cheng et al., 2020; Guo et al., 2022; Wu & Zi, 2024).

Work passion refers to employees’ strong love for their work, high valuation of it, and willingness to invest continuously, comprising harmonious work passion and obsessive work passion. The key distinction lies in whether work is internalized into one’s core self or identity (Vallerand & Houlfort, 2003; Vallerand et al., 2003). Employees with harmonious work passion experience high alignment between work and their authentic self, enabling autonomous engagement and enjoyment. Those with obsessive work passion are driven by internal and external pressures, exhibiting uncontrollable, compulsive investment in work (Astakhova & Porter, 2015). Existing research shows that perceived overqualification reduces harmonious work passion (Cheng et al., 2021; Cheng et al., 2020; Wu & Zi, 2024) and enhances obsessive work passion (Guo et al., 2022). However, other studies indicate that perceived overqualification can increase proactive behavior by strengthening role breadth self-efficacy (Zhang et al., 2016) or by stimulating work motivation (Ma et al., 2020), suggesting it may also enhance harmonious work passion while reducing obsessive work passion. These inconsistent findings may arise because existing research focuses on linear effects (e.g., Bochoridou & Gkorezis, 2023; Ding et al., 2022; Liu et al., 2024; Wu et al., 2025) while neglecting potential nonlinear effects (e.g., Duan et al., 2022; Lin et al., 2017), and because boundary conditions remain underexplored (Ma et al., 2023; Pan & Hou, 2024). Consequently, how perceived overqualification influences employee work passion remains unclear.

To address this theoretical gap, we draw on self-concept-based theory (Leonard et al., 1999) to examine the mechanisms and boundary conditions through which perceived overqualification affects work passion. First, self-concept theory posits that the perceived self—a crucial component of self-concept—represents individuals’ perceptions of their actual characteristics, abilities, and values. The perceived self is constructed through ordinal standards, whereby individuals determine their self-concept level by comparing their attributes with others (Leonard et al., 1999). We use perceived relative job advantage to measure employees’ perceived self formed through comparing work attributes with colleagues in similar positions, arguing that as perceived overqualification increases, perceived relative job advantage first strengthens then weakens, creating an inverted U-shaped relationship. This reflects the formation process of employees’

work ability perceptions.

Second, according to self-concept theory, the perceived self is influenced by task feedback from the environment. We select perceived justice of performance evaluation as a representative task feedback variable (London & Smither, 1995), emphasizing its “self-perception calibration” role in shaping employees’ work ability perceptions, thereby moderating the relationship between perceived overqualification and perceived relative job advantage. Third, self-concept theory further posits that individuals exhibit behaviors consistent with their perceived self to maintain cognitive consistency. Accordingly, employees’ perceived relative job advantage drives their work passion, representing the formation process of work motivation. Fourth, since the perceived self is also influenced by social feedback, we select leader enhancement of work meaningfulness as a representative social feedback variable (Smither et al., 2005), emphasizing its “meaning construction” role in shaping work motivation, thus moderating the relationship between perceived relative job advantage and work passion. Finally, we examine whether work passion translates into beneficial distal work outcomes (Vallerand et al., 2003), specifically its impact on job performance.

This study makes three primary contributions. First, by revealing the nonlinear relationship and boundary mechanisms between perceived overqualification and work passion, we overcome the limitation of prior research focusing on linear relationships, helping to clarify the complex effects of perceived overqualification on work passion. Second, grounded in self-concept theory and the perspective of perceived self, we examine the mechanism through which perceived overqualification influences work passion via perceived relative job advantage, theoretically clarifying this relationship and expanding the application of self-concept theory in overqualification research. Third, by testing how organizational performance feedback and leader-provided work meaning feedback serve as boundary conditions, we further elucidate the roles of task and social feedback in self-concept theory.

1.1 Perceived Overqualification and Perceived Relative Job Advantage

According to self-concept theory, the perceived self is a key dimension of self-concept influenced by ordinal standards (Leonard et al., 1999). In the workplace, perceived relative job advantage represents a typical form of perceived self, referring to employees’ sense of advantage derived from comparing work attributes with colleagues in similar positions, such as relative autonomy, responsibility, and promotion opportunities (Feldman et al., 1997; Kraimer et al., 2012). We propose an inverted U-shaped relationship between perceived overqualification and perceived relative job advantage.

Specifically, as perceived overqualification increases, employees sense they possess abilities and experience exceeding job requirements (Russell et al., 2016), enabling them to accomplish work goals with ease (Zhang et al., 2016), demon-

strate stronger potential (Erdogan et al., 2011), and make positive social contributions (Hu et al., 2015; Khan et al., 2022). Consequently, compared to colleagues in similar positions, employees feel superior status, greater promotion opportunities, and more work autonomy (Deng et al., 2018), perceiving stronger relative job advantage. However, when perceived overqualification reaches a certain level, employees feel their abilities far exceed job demands, making them more susceptible to strong negative emotions such as anger, anxiety, boredom, and damaged self-esteem due to the large gap between expectations and reality (Howard et al., 2022; Yang & Li, 2021). To alleviate cognitive dissonance caused by person-job misfit, employees adjust their self-perception (Leonard et al., 1999), such as lowering self-promotion ratings (Erdogan et al., 2020) or reducing evaluations of their superiority over colleagues (Erdogan & Bauer, 2009), causing perceived relative job advantage to gradually diminish. In summary, as perceived overqualification increases, perceived relative job advantage first strengthens then weakens. We therefore propose:

H1: Perceived overqualification has an inverted U-shaped relationship with perceived relative job advantage.

1.2 The Moderating Role of Perceived Justice of Performance Evaluation

Self-concept theory posits that the perceived self is influenced by task feedback during environmental interaction. Task feedback refers to direct feedback individuals receive about task outcomes; when inconsistent with the perceived self, individuals adjust their cognition to cope with cognitive dissonance (Leonard et al., 1999). Perceived justice of performance evaluation is a crucial source of task feedback (London & Smither, 1995), representing employees' perception that performance evaluations fairly reflect actual work performance (Korsgaard & Roberson, 1995). We argue that perceived justice of performance evaluation plays a "self-perception calibration" role in forming employees' work ability perceptions (i.e., the relationship between perceived overqualification and perceived relative job advantage).

Specifically, when perceived justice of performance evaluation is high, fair evaluations provide a clear environment for positive task feedback (Drouvelis & Paiardini, 2022), enabling employees to clearly understand their actual work abilities relative to colleagues through performance feedback (Van Dijk & Kluger, 2011). As perceived overqualification increases, employees can use fair performance feedback to revise their perceived self (Kluger & DeNisi, 1996), clarifying the reasonableness of their relative work abilities in their current position, thereby weakening the positive effect of perceived overqualification on perceived relative job advantage. When perceived overqualification reaches high levels, although employees experience negative emotions and cognitive dissonance due to person-job misfit (Erdogan & Bauer, 2009; Howard et al., 2022), causing perceived relative job advantage to decline, fair performance evaluation provides reasonable task feedback that helps employees objectively perceive their relative work

abilities and clarifies future work directions (Steelman et al., 2004), reducing negative emotions such as damaged self-esteem and weakening the negative effect of high perceived overqualification on perceived relative job advantage. Thus, perceived justice of performance evaluation helps employees adjust their work ability perception boundaries through clear feedback, flattening the inverted U-shaped relationship between perceived overqualification and perceived relative job advantage.

Conversely, when perceived justice of performance evaluation is low, employees receive ambiguous or inaccurate task feedback (Rubin & Edwards, 2018). As perceived overqualification increases, employees aware of low evaluation justice realize their current position may not reflect their true abilities, subjectively exaggerating their perceived relative job advantage. This intensifies the positive effect of perceived overqualification on perceived relative job advantage. When perceived overqualification reaches high levels, employees reduce perceived relative job advantage due to cognitive dissonance, and low-evaluation justice fails to provide accurate task feedback, causing further loss of reasonable work ability cognition (Debus et al., 2023) and exacerbating damaged self-esteem from person-job misfit perceptions (Schreurs et al., 2020), leading to even weaker perceived relative job advantage. This intensifies the negative effect of perceived overqualification on perceived relative job advantage. In this context, perceived justice of performance evaluation makes the inverted U-shaped relationship steeper. We therefore propose:

H2: Perceived justice of performance evaluation moderates the inverted U-shaped relationship between perceived overqualification and perceived relative job advantage, such that higher perceived justice of performance evaluation flattens the inverted U-shaped relationship.

1.3 Nonlinear Mediated Moderation

According to self-concept theory, during perceived self development, individuals generate internal and external motivation to maintain and enhance the perceived self, driving behavior consistent with it (Leonard et al., 1999). Internal motivation based on perceived self refers to self-concept formed according to internal standards that drives internal value realization, while external motivation refers to self-concept formed according to social expectations that drives fulfillment of external expectations. We propose that perceived relative job advantage stimulates both internal and external motivation based on perceived self, further driving harmonious and obsessive work passion. This represents the formation process of work motivation.

Specifically, when employees perceive high relative job advantage, they have greater work autonomy and decision-making power (Kraimer et al., 2012), stimulating pursuit of self-value realization and generating internal motivation based on perceived self (Vallerand, 2008), which drives autonomous work engagement and harmonious work passion (Curran et al., 2015; Zhang et al., 2023). Simulta-

neously, high perceived relative job advantage brings higher status, promotion opportunities, and compensation (Kraimer et al., 2012), stimulating desire for positive feedback affirming their abilities (Vallerand, 2008; Zhang et al., 2023). This external motivation based on perceived self drives work engagement for social recognition and performance requirements, generating obsessive work passion (Perttula & Cardon, 2011; Vallerand et al., 2023; Zhang et al., 2023). We therefore propose:

H3a: Perceived relative job advantage is positively related to harmonious work passion.

H3b: Perceived relative job advantage is positively related to obsessive work passion.

As noted, perceived relative job advantage is strongest at moderate levels of perceived overqualification. When employees simultaneously perceive high justice of performance evaluation, they receive ample performance feedback affirming their work ability and value (Van Dijk & Kluger, 2011), leading to higher perceived relative job advantage. In turn, perceived relative job advantage drives harmonious and obsessive work passion through internal and external motivation based on perceived self (Vallerand et al., 2023; Zhang et al., 2023). We therefore propose the nonlinear mediated moderation hypotheses:

H4a: The nonlinear interactive effect of perceived overqualification and perceived justice of performance evaluation indirectly influences harmonious work passion through perceived relative job advantage.

H4b: The nonlinear interactive effect of perceived overqualification and perceived justice of performance evaluation indirectly influences obsessive work passion through perceived relative job advantage.

1.4 The Moderating Role of Leader Enhancement of Work Meaningfulness

Self-concept theory also posits that the perceived self is influenced by social feedback during environmental interaction, whereby individuals obtain indirect feedback about their abilities from external workplace evaluations (Leonard et al., 1999). Leaders represent an important source of social feedback (Smither et al., 2005). Leader enhancement of work meaningfulness is a key way leaders provide social feedback, referring to leaders' clarification and affirmation of work meaning, value, and goals (Zhang & Bartol, 2010). We argue that leader enhancement of work meaningfulness may play a boundary role of "motivational meaning construction" in the formation of work motivation (i.e., the relationship between perceived relative job advantage and work passion) through social identification and value resonance.

Specifically, when leader enhancement of work meaningfulness is high, leaders highly recognize employees' work value, meaning, and contributions, conveying positive information about their role in achieving organizational goals (van

Dierendonck et al., 2024; Zhang et al., 2018). With more positive social feedback from leaders, employees with higher perceived relative job advantage can better confirm their positive perceived self (Deng et al., 2018) and experience stronger external motivation based on perceived self (Grant & Shandell, 2021; Leonard et al., 1999), tending to work actively to gain further leader recognition, thereby driving obsessive work passion. Simultaneously, employees can explore the intrinsic meaning and value of work based on leaders' task goals and development vision, mobilizing internal motivation based on perceived self to further drive harmonious work passion (Zhang et al., 2023). We therefore propose:

H5a: Leader enhancement of work meaningfulness positively moderates the relationship between perceived relative job advantage and harmonious work passion.

H5b: Leader enhancement of work meaningfulness positively moderates the relationship between perceived relative job advantage and obsessive work passion.

1.5 Work Passion and In-Role/Extra-Role Performance

Self-concept theory indicates that perceived self significantly influences individual behavioral outcomes (Leonard et al., 1999). To comprehensively understand the self-concept process, it is necessary to examine how work passion translates into specific work outcomes. Previous research shows that job performance is an important outcome variable influenced by work passion (e.g., Amarnani et al., 2020; Astakhova & Porter, 2015; Laurent et al., 2023). We therefore examine the impact of work passion on job performance, which includes in-role performance (ability and efficiency in completing position-related tasks and requirements) and extra-role performance (returns from behaviors beyond formal duties) (Motowidlo et al., 1997; Borman & Motowidlo, 1997).

We propose that harmonious work passion positively relates to both in-role and extra-role performance. Employees with harmonious work passion possess strong autonomous motivation, tending to engage in work positively and autonomously (Vallerand et al., 2023), demonstrating high attention and focus, thereby enhancing in-role performance (Astakhova & Porter, 2015). As an intrinsic work motivation, harmonious work passion also drives employees to invest extra effort beyond job responsibilities, promoting team progress and exhibiting more extra-role behaviors (Astakhova, 2015). We therefore propose:

H6a: Harmonious work passion is positively related to in-role performance.

H6b: Harmonious work passion is positively related to extra-role performance.

Obsessive work passion also affects in-role and extra-role performance. It often stems from strong external pressure (Perttula & Cardon, 2011; Vallerand et al., 2023), driving employees to continuously invest substantial energy and time to meet external expectations through improved work outcomes, thereby showing higher in-role performance (Amarnani et al., 2020; Astakhova & Ho, 2018).

Employees with obsessive work passion also strongly desire external recognition (Perttula & Cardon, 2011), making them more likely to exceed basic job duties through helping and proactive behaviors to gain higher external evaluation, thus exhibiting higher extra-role performance (Astakhova & Ho, 2018; Laurent et al., 2023). We therefore propose:

H7a: Obsessive work passion is positively related to in-role performance.

H7b: Obsessive work passion is positively related to extra-role performance.

The research model is shown in Figure 1 [Figure 1: see original paper].

2. Methods

2.1 Sample

Data were collected from a large state-owned bank in Southwest China. Through the bank's human resources headquarters, we contacted and invited 253 branches with 1,205 frontline employees and their 253 direct supervisors to participate. To ensure accurate matching and tracking, we obtained participants' names and phone numbers from HR headquarters along with employee-supervisor correspondence. Before the survey, we distributed informed consent forms stating that phone numbers and responses would be used solely for research purposes, with results and privacy strictly confidential. Participation began after voluntary consent.

Surveys were generated via Wenjuanxing platform and sent directly to participants via text message. Phone number verification was implemented to enable successful matching across time points. To ensure response rates and quality, participants who completed and submitted surveys were entered into an online lottery for cash rewards ranging from 20 to 100 RMB.

We employed a multi-source, multi-time-point design to minimize common method bias. Data collection occurred at four time points, each three weeks apart. At Time 1, employees reported demographic information (gender, age, education, tenure, job type), perceived overqualification, and perceived justice of performance evaluation (1,068 responses, 88.63% response rate). At Time 2, employees reported perceived relative job advantage (984 responses, 81.65%). At Time 3, employees reported leader enhancement of work meaningfulness, harmonious work passion, and obsessive work passion (1,023 responses, 84.89%). At Time 4, direct supervisors rated employees' in-role and extra-role performance (995 supervisor responses, 82.6%).

After data collection, we strictly matched multi-source, multi-time-point data using phone numbers and excluded samples with missing data, yielding 856 valid responses. The final sample consisted of 266 males (31.1%) and 590 females (68.9%), with an average age of 33.4 years ($SD = 9.34$). Employees aged 20-40 accounted for 75.7%, 73.4% held university degrees or higher, and average

tenure was 60.16 months ($SD = 94.54$). Regarding job types, 59.8% were tellers, 7.9% were lobby managers, and 32.2% were senior tellers.

2.2 Measures

All measures used established scales translated into Chinese using Brislin's (1980) back-translation procedure. All items used a 6-point Likert scale (1 = strongly disagree, 6 = strongly agree).

Perceived overqualification was measured using Erdogan and Bauer's (2009) 4-item scale ($\alpha = 0.86$). A sample item is "My actual work experience exceeds what is required for this job."

Perceived justice of performance evaluation was measured using Korsgaard and Roberson's (1995) 4-item scale ($\alpha = 0.97$). A sample item is "My performance evaluation fairly reflects my actual performance from last year."

Perceived relative job advantage was adapted from Kraimer et al.'s (2012) scale. The original scale measured negative perceptions of relative advantage deprivation; we adapted it to measure positive perceptions while retaining core items. We removed four items: one concerning international affairs (irrelevant to our banking context) and three concerning relative salary perceptions (inappropriate given the bank's confidential salary policy, which could cause privacy concerns and inaccurate responses). The adapted 8-item scale ($\alpha = 0.96$) includes items such as "I am seen as having greater promotion potential."

Leader enhancement of work meaningfulness was measured using Zhang and Bartol's (2010) 3-item scale ($\alpha = 0.97$). A sample item is "My leader helps me understand the importance of my work to the company's overall effectiveness."

Harmonious work passion was measured using Vallerand and Houliort's (2003) 7-item scale ($\alpha = 0.94$). A sample item is "New things that I have discovered about my work have deepened my liking for it."

Obsessive work passion was measured using Vallerand and Houliort's (2003) 7-item scale ($\alpha = 0.94$). A sample item is "I have an almost obsessive passion for my work."

In-role performance was measured using Schaubroeck et al.'s (2016) 3-item customer service performance scale ($\alpha = 0.94$). In banking and service industries, in-role performance is closely tied to customer service quality, making this scale appropriate for assessing core job responsibilities (Yang, 2012). A sample item is "He/she provides high-quality service to customers."

Extra-role performance was measured using Farh et al.'s (2007) 9-item scale ($\alpha = 0.97$). A sample item is "He/she assists colleagues with heavy workloads."

Control variables included gender, age, education, tenure (in months), and job type, as these have been shown to influence work passion (Curran et al.,

2015; Perrewé et al., 2014) and job type can affect work motivation and behavior (Liu et al., 2010).

2.3 Analytical Strategy

Given the nested data structure (employees nested within teams), we followed Berger et al. (2022) and Meyers et al. (2023) and used Mplus 7.4 (Muthén & Muthén, 2007) to conduct multilevel structural equation modeling (MSEM), estimating all hypothesized paths simultaneously while considering within-level and between-level effects. All predictor variables except outcome variables (in-role and extra-role performance) were grand-mean centered to enhance parameter interpretability and reduce multicollinearity (Hofmann et al., 2000; Lin et al., 2017). We also controlled for the correlation between harmonious and obsessive work passion and between in-role and extra-role performance to improve model fit and explanatory power (Barile, 2015).

To test the nonlinear mediated moderation proposed in Hypotheses 4a and 4b, we followed Preacher et al. (2007) and Hayes (2013) and adapted Lin et al.'s (2017) computational method to construct the statistic. First, we constructed Equation (1) to test the nonlinear relationship between perceived overqualification and perceived relative job advantage:

$$RJA = \delta_0 + \delta_c(\text{controls}) + \delta_1 POQ + \delta_2 POQ^2 \quad (1)$$

Second, we constructed Equation (2) to test the moderated nonlinear relationship:

$$RJA = \delta_0 + \delta_c(\text{controls}) + \delta_1 POQ + \delta_2 POQ^2 + \delta_3 JUS + \delta_4 JUS \times POQ + \delta_5 JUS \times POQ^2 \quad (2)$$

where RJA is perceived relative job advantage, POQ is perceived overqualification, and JUS is perceived justice of performance evaluation. In Equation (2), significant δ_2 indicates a nonlinear relationship between perceived overqualification and perceived relative job advantage, while significant δ_5 indicates that this nonlinear relationship is moderated by perceived justice of performance evaluation.

Third, the linear relationship between perceived relative job advantage and harmonious passion (HP) is tested by the significance of γ_1 in Equation (3):

$$HP = \gamma_0 + \gamma_1 RJA + \text{error} \quad (3)$$

Following Hayes and Preacher (2010), nonlinear mediation is a special form of mediation. In this study, the independent variable (POQ) has a nonlinear relationship with the mediator (RJA), while the mediator (RJA) has a linear

relationship with the dependent variable (*HP*). The indirect effect is calculated as the product of the partial derivative of the mediator with respect to the independent variable and the partial derivative of the dependent variable with respect to the mediator. We therefore constructed Equation (4) to calculate the nonlinear mediation effect θ :

$$\theta = \frac{\partial RJA}{\partial POQ} \times \frac{\partial HP}{\partial RJA} \quad (4)$$

From Equation (2), the partial derivative of perceived relative job advantage with respect to perceived overqualification is:

$$\frac{\partial RJA}{\partial POQ} = \delta_1 + \delta_4 JUS + 2\delta_2 POQ + 2\delta_5 JUS \times POQ \quad (5)$$

From Equation (3), the partial derivative of harmonious passion with respect to perceived relative job advantage is $\frac{\partial HP}{\partial RJA} = \gamma_1$. Based on Equations (4) and (5), the indirect effect of the nonlinear interaction between perceived overqualification and perceived justice of performance evaluation on harmonious passion through perceived relative job advantage is:

$$\theta = [\delta_1 + \delta_4 JUS + 2\delta_2 POQ + 2\delta_5 JUS \times POQ] \gamma_1 \quad (6)$$

In Equation (6), θ is not a fixed value but a linear function of perceived overqualification, perceived justice of performance evaluation, and their interaction. Following Lin et al. (2017), we judge the significance of this nonlinear mediated moderation by testing whether θ values differ significantly from zero across high and low combinations of perceived overqualification and perceived justice of performance evaluation.

3. Results

3.1 Descriptive Statistics and Correlation Analysis

Using SPSS 26.0, we calculated means, standard deviations, correlations, and Cronbach's alphas for all variables (see Table 1). Perceived relative job advantage positively correlated with harmonious work passion ($r = 0.36, p < 0.001$) and obsessive work passion ($r = 0.29, p < 0.001$). Harmonious work passion positively correlated with in-role performance ($r = 0.10, p = 0.01$) and extra-role performance ($r = 0.08, p = 0.02$), providing preliminary support for our hypotheses. All Cronbach's alphas exceeded 0.85, indicating high internal consistency.

3.2 Common Method Bias and Confirmatory Factor Analysis

Using Mplus 7.4, we conducted multilevel confirmatory factor analysis (MCFA). As shown in Table 2, the eight-factor model fit the data best ($\chi^2/df = 2.03$, RMSEA = 0.04, SRMR = 0.03, CFI = 0.97, TLI = 0.97), with alternative models showing significantly worse fit. Additionally, the multi-source, multi-time-point design minimized common method bias concerns.

3.3 Hypothesis Testing

To test Hypothesis 1's proposed inverted U-shaped relationship, we used Haans et al.'s (2016) three-step procedure. First, we tested the quadratic coefficient. Table 3 shows that the linear term was non-significant ($\beta = -0.07$, $p = 0.07$), while the quadratic term was significantly negative ($\beta = -0.06$, $p = 0.04$), indicating a significant inverted U-shaped relationship (see Figure 2 [Figure 2: see original paper]). Second, we tested slope significance at both ends. The slope at the minimum observed value of perceived overqualification ($POQ_{min} = -2.71$) was positive ($\beta = 0.26$), while the slope at the maximum value ($POQ_{max} = 2.29$) was negative ($\beta = -0.34$), confirming the rise-and-fall pattern. Third, we tested the inflection point significance. The inflection point for mean-centered perceived overqualification ($POQ^* = -0.58$) fell within the observed range $[-2.71, 2.29]$. Using the Delta method, the 95% confidence interval $[-1.45, 0.28]$ fell entirely within the sample range, confirming statistical stability. Hypothesis 1 is supported.

Hypothesis 2 proposed that perceived justice of performance evaluation moderates the inverted U-shaped relationship. Following Haans et al. (2016), we tested both inflection point shift and curvature change. For inflection point shift, the derivative estimate was non-zero ($\beta = -0.14$) but its confidence interval $[-6.74, 6.46]$ included zero and was extremely wide, indicating non-significant inflection point movement. For curvature change, Table 3 shows the quadratic term's interaction with perceived justice of performance evaluation was significantly positive ($\beta = 0.04$, $p = 0.03$), indicating the curve flattened. At low justice, the inverted U-shaped relationship was steeper ($\beta_{quadratic} = -0.18$, 95% CI $[-0.33, -0.03]$); at high justice, it flattened ($\beta_{quadratic} = -0.02$, 95% CI $[-0.17, 0.13]$). This supports the curvature change effect. Figure 3 [Figure 3: see original paper] illustrates that at low justice, perceived relative job advantage ranged from 0.06 to 0.63 (difference = 0.57), while at high justice it ranged from 0.96 to 1.06 (difference = 0.10). Hypothesis 2 is supported.

Hypotheses 3a and 3b proposed linear relationships between perceived relative job advantage and work passion. Table 4 shows perceived relative job advantage significantly predicted harmonious work passion ($\beta = 0.17$, $p < 0.001$) and obsessive work passion ($\beta = 0.21$, $p < 0.001$). Both hypotheses are supported.

Hypotheses 4a and 4b proposed nonlinear mediated moderation. Using the θ calculation from Equation (6), for harmonious work passion, θ differences between high and low justice were non-significant at low overqualification ($\theta_{diff} = -0.02$,

95% CI $[-0.05, 0.01]$) but significant at high overqualification ($\theta_{diff} = 0.03$, 95% CI $[-0.001, 0.06]$). The θ difference between high and low overqualification was significant ($\theta_{diff} = 0.05$, 95% CI $[0.004, 0.10]$), supporting Hypothesis 4a. For obsessive work passion, results were similar: non-significant θ difference at low overqualification ($\theta_{diff} = -0.03$, 95% CI $[-0.06, 0.01]$), significant at high overqualification ($\theta_{diff} = 0.03$, 95% CI $[-0.002, 0.07]$), and significant difference between high and low overqualification ($\theta_{diff} = 0.06$, 95% CI $[0.004, 0.12]$), supporting Hypothesis 4b.

Hypotheses 5a and 5b proposed positive moderation by leader enhancement of work meaningfulness. Table 4 shows the interaction term was significant and positive for harmonious work passion ($\beta = 0.09$, $p < 0.001$, 95% CI $[0.05, 0.12]$) and obsessive work passion ($\beta = 0.06$, $p = 0.02$, 95% CI $[0.01, 0.10]$). Both hypotheses are supported.

Hypotheses 6 and 7 proposed positive relationships between work passion and performance. Table 5 shows harmonious work passion positively predicted in-role performance ($\beta = 0.14$, $p = 0.03$, 95% CI $[0.01, 0.27]$) and extra-role performance ($\beta = 0.13$, $p = 0.04$, 95% CI $[0.01, 0.26]$), supporting Hypotheses 6a and 6b. However, obsessive work passion did not significantly predict in-role performance ($\beta = -0.01$, $p = 0.88$, 95% CI $[-0.11, 0.10]$) or extra-role performance ($\beta = -0.05$, $p = 0.39$, 95% CI $[-0.15, 0.06]$). Hypotheses 7a and 7b are not supported.

4. Discussion

4.1 Theoretical Contributions

First, this study reveals the nonlinear effect of perceived overqualification on work passion, providing a new perspective to clarify their relationship and enriching overqualification research. Inconsistent findings in prior research (e.g., Cheng et al., 2020; Guo et al., 2022; Liu et al., 2024; Ma et al., 2020) may stem from the focus on linear effects. Our nonlinear approach reveals the inverted U-shaped relationship between perceived overqualification and perceived relative job advantage, addressing these contradictions and responding to calls for research on the “too much of a good thing” effect in overqualification (e.g., Duan et al., 2022; Liu et al., 2024).

Second, grounded in self-concept theory, we examine the mechanism through which perceived overqualification influences work passion via perceived relative job advantage, enriching mediation research and expanding self-concept theory’s application. While previous studies have used self-concept perspectives (e.g., He & Li, 2024; Li et al., 2019), they primarily relied on self-representation theory. We build on Leonard et al.’s (1999) self-concept theory to construct a dynamic “self-cognition activation—motivation triggering—behavior transformation” mechanism. By introducing perceived relative job advantage, we capture the dynamic process of self-concept construction, moving beyond linear assumptions prevalent in prior research (He & Li, 2024; Li et al., 2019).

Third, we reveal how organizational performance feedback and leader-provided work meaning feedback serve as boundary conditions, clarifying the distinct roles of task and social feedback in self-concept theory. Perceived justice of performance evaluation demonstrates the “cognitive calibration” function of task feedback (Ni & Zheng, 2023), while leader enhancement of work meaningfulness shows the “meaning construction” function of social feedback (Ma et al., 2023). Unlike previous research applying self-concept theory that examined both feedback types on the same psychological pathway (e.g., Ma et al., 2020), we demonstrate their differential effects on distinct psychological processes.

Fourth, by examining work passion’s effects on performance, we enrich research on distal outcomes. Our findings show harmonious work passion significantly predicts supervisor-rated performance, while obsessive work passion does not. This validates the positive relationship between harmonious passion and performance (e.g., Amarnani et al., 2020; Laurent et al., 2023) and reveals performance differences between passion types, contrasting with some findings that obsessive passion negatively affects performance (e.g., Birkeland & Buch, 2015; Ho et al., 2011). This suggests obsessive passion’s effects may be context-dependent, warranting future research on boundary conditions (Amarnani et al., 2020).

4.2 Managerial Implications

First, managers should recognize the prevalence of perceived overqualification and understand its psychological and behavioral impacts. They need to balance the “sweet spot” where overqualification benefits both individuals and organizations while minimizing negative effects through measures promoting “high-quality, full employment.” Second, organizations should foster fair climates to reduce adverse effects of overqualification, using fair performance evaluations to flexibly adjust positions and promote employment quality through justice. Third, managers should enhance work meaningfulness to boost passion and performance, particularly when organizational systems are imperfect, by sharing organizational vision and mission to instill intrinsic value. Fourth, leaders should cultivate harmonious work passion to facilitate its positive transformation into performance.

4.3 Limitations and Future Directions

First, despite multi-source, multi-time-point design, our reliance on subjective questionnaire data remains a limitation. Future research could incorporate more objective outcomes, such as archival performance data for in-role performance and team innovation metrics for extra-role performance.

Second, our design does not permit strict causal inference. Reverse causality is possible: employees with relative job advantages may perceive stronger status and promotion potential, increasing perceived overqualification and fairness perceptions. Future research could use laboratory or field experiments to establish causality and combine quantitative and qualitative methods to explore

psychological mechanisms.

Third, our sample from one large state-owned bank in Southwest China limits generalizability. Future studies should test our model across multiple provinces and industries to enhance external validity. Additionally, banking's rigid job content, limited career advancement, and technological disruption may intensify perceived overqualification (McKinlay, 2013). Since work environments significantly affect attitudes and behaviors (Ashkanasy et al., 2014; Poethke et al., 2023), our findings' applicability to other contexts requires verification.

Finally, while we selected representative constructs for perceived self, task feedback, and social feedback, they do not exhaust these domains. Future research could incorporate additional constructs to strengthen theoretical credibility and explore other potential mechanisms and boundary conditions in the overqualification-work passion relationship.

References

References are preserved exactly as in the original manuscript.

Appendices: Research Questionnaires

Time 1 Employee Questionnaire

Perceived Overqualification Scale

Please indicate your agreement with each statement (1 = strongly disagree, 6 = strongly agree):

1. My education level exceeds my current job requirements.
2. I cannot fully utilize my talents in my current job.
3. My actual work experience exceeds what is required for this job.
4. My skill level exceeds my current job requirements.

Perceived Justice of Performance Evaluation Scale

Please indicate your agreement with each statement (1 = strongly disagree, 6 = strongly agree):

1. My performance evaluation results are very fair.
2. I agree with my annual performance rating.
3. I agree with how my leader evaluates my performance.
4. My performance evaluation fairly reflects my actual performance from last year.

Control Variables

1. Gender: (1) Male (2) Female
2. Age: { } years
3. Education: (1) High school or below (2) College (3) Bachelor's (4) Master's or above
4. Tenure at current branch: { } years { } months
5. Job type: (1) Teller (2) Lobby manager (3) Senior teller

Time 2 Employee Questionnaire

Perceived Relative Job Advantage Scale

Please indicate your agreement with each statement (1 = strongly disagree, 6 = strongly agree):

1. I have better promotion opportunities.
2. My promotion speed is faster.
3. I am seen as having greater promotion potential.
4. I receive more respect from others.
5. I have higher status (or prestige) in the company.
6. I have more autonomy to set my own work goals.
7. I have more freedom at work to act independently of my leader.
8. I can take more responsibility for my own decisions.

Time 3 Employee Questionnaire

Leader Enhancement of Work Meaningfulness Scale

Please indicate your agreement with each statement (1 = strongly disagree, 6 = strongly agree):

1. My leader helps me understand the relationship between my goals and company goals.
2. My leader helps me understand the importance of my work to the company's overall effectiveness.
3. My leader helps me understand how my work fits into the big picture.

Harmonious Work Passion Scale

Please indicate your agreement with each statement (1 = strongly disagree, 6 = strongly agree):

1. My work brings me diverse experiences.
2. New things I have discovered about my work have deepened my liking for it.
3. My work brings me unforgettable experiences.
4. My work allows me to show qualities I like about myself.
5. My work is in harmony with other activities in my life and does not conflict with them.
6. My passion for work remains within controllable limits.
7. I am completely absorbed by my work.

Obsessive Work Passion Scale

Please indicate your agreement with each statement (1 = strongly disagree, 6 = strongly agree):

1. My life would be meaningless without work.
2. I cannot resist the urge to work.
3. I cannot imagine life without work.
4. I am emotionally dependent on my work.
5. I have difficulty controlling my need to work.
6. I have an almost obsessive passion for my work.
7. My mood depends on whether I can work.

Time 4 Supervisor Questionnaire

Please evaluate the employee {{{_}}{}}_____ based on their behavior over the past four weeks. Rate their work performance on each item (1 = strongly disagree, 6 = strongly agree).

In-Role Performance Scale

1. He/she provides excellent service to customers.
2. He/she achieves excellent service performance.
3. His/her service performance exceeds our expectations.

Extra-Role Performance Scale

1. He/she proactively helps colleagues with heavy workloads.
2. He/she helps new employees adapt to the work environment.
3. He/she is willing to help colleagues solve work-related problems.
4. He/she actively makes suggestions to improve work procedures or processes.
5. He/she actively proposes suggestions to help the organization operate more efficiently or effectively.
6. He/she works hard and shows strong responsibility even when work outcomes do not affect personal performance evaluation.
7. He/she is willing to work overtime without extra pay.
8. He/she voluntarily works overtime when necessary to complete work.
9. He/she arrives early and starts work immediately.

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.