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## The Impact of Idiosyncratic Deals on Employee Proactive Career Behavior and Creativity

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**Date:** 2019-09-24T00:00:00+00:00

### Abstract

Idiosyncratic deals are non-standard work arrangements voluntarily negotiated and reached between employees and organizations. Grounded in self-determination theory, this study investigates the influence mechanisms of idiosyncratic deals on employees' proactive career behaviors and creativity, along with their boundary conditions. Through analyzing 230 matched "employee-supervisor" dyadic data, this research reveals that idiosyncratic deals strengthen the satisfaction of employees' basic psychological needs (competence, autonomy, and relatedness), thereby fostering proactive career behaviors and creativity, with competence need satisfaction mediating the effects of idiosyncratic deals on both proactive career behaviors and creativity. Additionally, higher workload not only amplifies the positive influence of idiosyncratic deals on competence and autonomy need satisfaction, but also strengthens the mediating effect whereby idiosyncratic deals enhance employees' proactive career behaviors and creativity through increased competence need satisfaction.

### Full Text

## The Influence of Idiosyncratic Deals on Employee Proactive Career Behavior and Creativity

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## Abstract

Idiosyncratic deals refer to non-standardized employment agreements voluntarily negotiated between employees and organizations. Grounded in self-determination theory, this study examines the influence mechanisms and boundary conditions of idiosyncratic deals on employee proactive career behavior and creativity. Through analysis of 230 matched “employee-supervisor” dyads, the findings reveal that idiosyncratic deals enhance satisfaction of employees’ basic psychological needs (competence, autonomy, and relatedness), thereby promoting proactive career behavior and creativity. Competence need satisfaction mediates the relationship between idiosyncratic deals and both proactive career behavior and creativity. Furthermore, higher levels of workload not only strengthen the positive effect of idiosyncratic deals on competence and autonomy need satisfaction, but also enhance the mediating effect of idiosyncratic deals on proactive career behavior and creativity through competence need satisfaction.

**Keywords:** idiosyncratic deals; psychological needs satisfaction; proactive career behavior; creativity; workload

**Classification Code:** B849:C93

## 1. Introduction

Idiosyncratic deals (i-deals) refer to “personalized employment arrangements negotiated between individual employees and their employers” (Rousseau, Ho, & Greenberg, 2006, p. 978). Early research on i-deals primarily focused on antecedents or discussed mechanisms and outcomes based on social exchange theory (see Anand, Vidyarthi, Liden, & Rousseau, 2010; Hornung, Rousseau, Glaser, Angerer, & Weigl, 2010; Rousseau et al., 2006). Recent meta-analytic reviews have called for research to examine more diverse effects and underlying mechanisms beyond the social exchange framework (e.g., Liao, Wayne, & Rousseau, 2016).

Responding to this call, the present study draws on self-determination theory (Deci & Ryan, 2000, 2004) to propose that i-deals promote proactive career behavior and creativity by enhancing psychological needs satisfaction. Moreover, since psychological needs satisfaction and intrinsic motivation are particularly salient in challenging work environments (Deci, 1975), the effect of i-deals as a key job resource is also contingent upon workload levels.

**Received:** December 15, 2017

**Funding:** Supported by the National Natural Science Foundation of China Distinguished Young Scholars Fund (No. 71425004)

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### 1.1 Idiosyncratic Deals and Employee Proactive Career Behavior and Creativity

Unlike organizational policies or leadership behaviors primarily determined by the organization or supervisors, i-deals are non-standardized work arrangements negotiated between employees and organizations (Rousseau et al., 2006). This collaborative job redesign process not only addresses employees' personalized needs (Hornung et al., 2010) but also creates conditions for their long-term development, thus promoting proactive career behavior. First, i-deals reflect employees' preferences regarding personal development and job content (Rousseau et al., 2006; Rousseau & Kim, 2006), encouraging them to invest more effort in work content and career directions they identify with (Strauss, Griffin, & Parker, 2012). Second, i-deals provide a clear path for career development with strong vision-inspiring functions (Owens & Hekman, 2012), thereby motivating career development behaviors (Strauss et al., 2012; Zhang, Ye, Peng, & Chen, 2016).

In addition to promoting proactive career behavior, i-deals, as an informational environment, should also enhance employee creativity. First, i-deals provide employees with challenging tasks and targeted design and guidance for career development, clarifying job content and direction, which promotes creativity (Hornung et al., 2010). Second, the establishment of i-deals signals information about employee competence (Rousseau et al., 2006), suggesting these employees are more capable of completing creative work. Third, i-deals provide an autonomy-supportive work environment, enabling employees to experiment with recombining different work tasks and content, thereby enhancing creativity (Tierney & Farmer, 2004; Wang & Cheng, 2010).

Based on these arguments, we propose:

**Hypothesis 1:** Idiosyncratic deals are positively related to (a) proactive career behavior and (b) employee creativity.

### 1.2 Idiosyncratic Deals and Psychological Needs Satisfaction

Self-determination theory posits that competence, autonomy, and relatedness are fundamental elements promoting individual cognitive growth (Deci & Ryan, 2000), and that informational work environments facilitate satisfaction of these three basic psychological needs (Zhang, Zhang, Li, & Deci, 2010). Therefore, i-deals should also promote satisfaction of these three needs.

First, i-deals enhance competence need satisfaction. I-deals are often premised on organizational recognition of employees' abilities and value (Rousseau et al., 2006). Their establishment signifies that these employees hold greater value for or can contribute more to the organization than their colleagues (Ho & Kong, 2015; Rousseau et al., 2006), and this signal regarding personal ability enhances competence need satisfaction. Additionally, i-deals provide employees with targeted task responsibilities and corresponding developmental guidance, supporting them to maximize their talents and showcase themselves (Hornung et al.,

2010). Such supportive environments that encourage exploration and learning significantly promote competence need satisfaction (Deci & Ryan, 2000).

Second, employees can satisfy their autonomy needs both during and after i-deals negotiation. On one hand, employees enjoy high levels of autonomy during the negotiation process as they redesign their job tasks, career development, and work flexibility through consultation and negotiation with the organization (Rousseau & Kim, 2006; Hornung et al., 2010), thereby satisfying their autonomy needs. On the other hand, the content of i-deals—the outcome of employee-organization negotiation—also provides employees with greater job autonomy or flexibility (Rousseau et al., 2006).

Third, i-deals should also promote relatedness need satisfaction. According to self-determination theory, others' recognition of one's perspectives and ideas and the establishment of intimate relationships with others enhance relatedness need satisfaction (Deci & Ryan, 2000, 2008). First, personalized work arrangements signal that the organization recognizes employees' perspectives and ideas, making employees feel respected by the organization (Owens & Hekman, 2012). Second, the negotiation process for i-deals enhances employees' connection with the organization and improves leader-member exchange quality (Anand, 2012), promoting relatedness need satisfaction.

Based on these arguments, we propose:

**Hypothesis 2:** Idiosyncratic deals are positively related to (a) competence need satisfaction, (b) autonomy need satisfaction, and (c) relatedness need satisfaction.

Self-determination theory suggests that basic psychological needs are the link between external environments and individual motivation and behavior. Informational environments satisfy psychological needs, enhance intrinsic motivation, and subsequently positively influence attitudes and behaviors (Deci & Ryan, 2000, 2004). Therefore, the effects of i-deals—one of the external environments employees face—on proactive career behavior and creativity may be mediated by psychological needs satisfaction.

Specifically, when external work environments or conditions satisfy employees' basic psychological needs, their intrinsic motivation at work increases (Deci & Ryan, 2000), thereby promoting proactive behaviors (Ohly & Fritz, 2010). First, competence need satisfaction can promote career development behaviors. When employees' competence needs are satisfied, they spontaneously invest more effort in their work (Han, Liao, & Long, 2007), driving career development activities (Liu, Huang, Sheng, Wang, & Yu, 2018). Second, the greater job autonomy employees gain from i-deals compared to colleagues makes them feel trusted by the organization (Deci & Ryan, 2000), thereby enhancing their sense of mission and responsibility (Ohly & Fritz, 2010), which further promotes proactive career behavior. Third, support provided by supervisors (e.g., negotiating i-deals that better suit employees' personal development) also enhances employees' internal identification, prompting them to voluntarily engage in behaviors beyond

expectations (Jokisaari & Nurmi, 2009; Nifadkar, Tsui, & Ashforth, 2012) and develop career plans aligned with organizational development (Liu et al., 2018).

On the other hand, psychological needs satisfaction also promotes employee creativity. First, creativity is based on certain professional knowledge and skills (Amabile, 1997), and competence need satisfaction can enhance employees' confidence to work creatively (Yang, Yang, Jing, & Tang, 2018). Second, autonomy need satisfaction enables employees to feel more decision-making authority at work, providing more psychological resources for creativity enhancement (Eisenberger & Aselage, 2009). Third, relatedness need satisfaction facilitates work communication, providing a necessary relational foundation for implementing creative ideas (Nielsen, Marrone, & Slay, 2010; Yang et al., 2018).

In summary, combined with the arguments for Hypotheses 1 and 2, we propose:

**Hypothesis 3:** (a) Competence need satisfaction, (b) autonomy need satisfaction, and (c) relatedness need satisfaction mediate the positive relationship between idiosyncratic deals and employee proactive career behavior.

**Hypothesis 4:** (a) Competence need satisfaction, (b) autonomy need satisfaction, and (c) relatedness need satisfaction mediate the positive relationship between idiosyncratic deals and employee creativity.

### 1.3 The Boundary Effect of Workload

According to self-determination theory, external environments are important factors affecting psychological needs satisfaction, and challenging work environments are often more conducive to promoting needs satisfaction (Deci, 1975). In challenging situations, individuals need to utilize resources provided by themselves and the organization to cope with such pressures and challenges, making the utility of job resources (such as i-deals) even greater (Bakker, Van Veldhoven, & Xanthopoulou, 2010; Seers, McGee, Serey, & Graen, 1983). Specifically, workload refers to the work tasks individuals undertake—the challenging work pressure that individuals need to overcome to achieve their goals (LePine, Podsakoff, & LePine, 2005). When employees face low workload, they can cope with job demands without mobilizing many resources, and the impact of available job resources on work motivation and behavior is relatively weak. However, when employees face higher workload, they need to fully mobilize available job resources (such as i-deals) to meet challenges. At this time, these job resources play a more important role in helping employees cope with work pressure and engage in work-related tasks, thus having a more prominent impact on employee work motivation and behavior. Therefore, workload should strengthen the promoting effect of i-deals on psychological needs satisfaction. Based on this, we propose:

**Hypothesis 5:** Workload moderates the relationship between idiosyncratic deals and psychological needs satisfaction: when workload is higher, the positive effects of idiosyncratic deals on (a) competence need satisfaction, (b) autonomy need satisfaction, and (c) relatedness need satisfaction are stronger.

Combined with the above hypotheses, the indirect effects of idiosyncratic deals on proactive career behavior and creativity through psychological needs satisfaction should also be moderated by different workload levels. Since psychological needs satisfaction promotes proactive career behavior and creativity, workload levels should also moderate the indirect effect of i-deals on these outcomes via psychological needs satisfaction. Based on this, we propose:

**Hypothesis 6:** The mediating effects of (a) competence need satisfaction, (b) autonomy need satisfaction, and (c) relatedness need satisfaction on the relationship between idiosyncratic deals and proactive career behavior are moderated by workload: compared to low workload situations, these mediating effects are stronger when employees face higher workload.

**Hypothesis 7:** The mediating effects of (a) competence need satisfaction, (b) autonomy need satisfaction, and (c) relatedness need satisfaction on the relationship between idiosyncratic deals and creativity are moderated by workload: compared to low workload situations, these mediating effects are stronger when employees face higher workload.

The research hypotheses included in this study are shown in Figure 1 [Figure 1: see original paper].

## 2. Method

### 2.1 Sample and Procedure

Data were collected from 230 matched “employee-supervisor” questionnaires in service and sales industries in Guangzhou and Shenzhen. The participating companies had relatively flexible human resource policies, allowing employees to negotiate personalized job tasks, training opportunities, and flexible work schedules. The research team first contacted HR departments or relevant managers to explain the research purpose and sampling requirements, then conducted data collection based on employee rosters provided by the companies, following the principle of voluntary participation. To ensure data authenticity and scientific rigor, investigators explained the research purpose, confidentiality principles, and questionnaire items to participants before confirming their understanding and beginning data collection. The sample included 96 males (41.7%) and 102 married individuals (44.3%). The average age of participants was 3.76 years ( $SD = 3.62$ ).

Data collection occurred in three waves, with two-month intervals between each wave. Idiosyncratic deals and demographic characteristics were collected at Time 1 (T1). Workload, competence need satisfaction, autonomy need satisfaction, and relatedness need satisfaction were collected at Time 2 (T2). Proactive career behavior and creativity were collected at Time 3 (T3). Except for employee creativity, which was rated by supervisors, all other variables were reported by employees. At T1, 300 questionnaires were distributed, with 271 returned. After eliminating invalid questionnaires (primarily those with missing

key items), 258 valid questionnaires were obtained. At T2, 239 valid questionnaires were received. At T3, 40 valid supervisor questionnaires and 230 matched valid employee questionnaires were received. The overall response rate was 76.7%. Independent samples t-tests and chi-square tests showed no significant differences between the final sample and attrition sample in terms of age ( $t = 1.27, p > 0.05$ ), gender ( $\chi^2 = 0.71, p > 0.05$ ), idiosyncratic deals ( $t = 0.78, p > 0.05$ ), workload ( $t = -0.69, p > 0.05$ ), competence need satisfaction ( $t = -0.70, p > 0.05$ ), autonomy need satisfaction ( $t = 0.74, p > 0.05$ ), or proactive career behavior ( $t = -0.24, p > 0.05$ ).

## 2.2 Variable Measurement

All measures were selected from established foreign scales and translated into Chinese using standard translation-back-translation procedures. All scales used a 5-point Likert scale, with 5 indicating “strongly agree” and 1 indicating “strongly disagree.”

**Idiosyncratic deals.** We measured i-deals using scales developed by Rousseau & Kim (2006) and Hornung et al. (2010). The scale comprises 12 items: 5 measuring development-based content, 3 measuring flexibility-based content, and 4 measuring task-based content. This scale is widely used in i-deals research and has demonstrated good reliability and validity in previous studies (e.g., Anand et al., 2010; Hornung et al., 2011; Lü, Fan, Zhang, & Li, 2016). Sample items include “I have asked for and obtained a flexible work schedule” and “I have asked for and obtained challenging job tasks.” In this study, ICC(1) was 0.29 and ICC(2) was 0.70, indicating the variable was appropriate for individual-level analysis. Cronbach’s alpha was 0.89.

**Competence need satisfaction, autonomy need satisfaction, and relatedness need satisfaction.** We used the scale developed by La Guardia et al. (2000) to measure basic psychological needs satisfaction. Each of the three needs was measured with 3 items. This scale has been widely used to measure psychological needs satisfaction and has shown good reliability and validity in both domestic and international studies (e.g., Weinstein & Ryan, 2010; Yang et al., 2018). Sample items include “I feel very capable and effective in my organization” (competence), “I can freely express my ideas and opinions at work” (autonomy), and “I feel loved and cared for in my organization” (relatedness). In this study, within-group variance for competence need satisfaction was greater than between-group variance; ICC(1) for autonomy need satisfaction was 0.15 and ICC(2) was 0.50; ICC(1) for relatedness need satisfaction was 0.11 and ICC(2) was 0.41, indicating psychological needs satisfaction was appropriate for individual-level analysis. Cronbach’s alphas were 0.76, 0.77, and 0.70 for competence, autonomy, and relatedness need satisfaction, respectively.

**Workload.** We used the scale developed by Ilies et al. (2007) to measure workload. This 9-item scale is a well-established measure in organizational behavior research and has demonstrated good reliability and validity in previous studies

(e.g., Goh, Ilies, & Wilson, 2015; Ilies, Dimotakis, & Pater, 2010). Sample items include “Do you have a large amount of work to complete?” and “Do you have to work at a fast pace?” In this study, ICC(1) was 0.37 and ICC(2) was 0.77, indicating workload was appropriate for individual-level analysis. Cronbach’s alpha was 0.83.

**Proactive career behavior.** We measured proactive career behavior using the scale developed by Strauss et al. (2012). This scale integrates measures from Claes & Ruiz-Quintanilla (1998) and others, and has been widely used in proactive career behavior research with good reliability and validity (e.g., Huang & Hsieh, 2015; Taber & Blankemeyer, 2015). The 13-item scale comprises four dimensions: career planning (4 items), skill development (3 items), career consultation (3 items), and networking (3 items). Sample items include “Recently I have started thinking more about what I want to achieve in my job in the next year or two” and “I am developing skills that, while not immediately important, will be useful for my future positions.” In this study, ICC(1) was 0.07 and ICC(2) was 0.29, indicating the variable was appropriate for individual-level analysis. Cronbach’s alpha was 0.88.

**Employee creativity.** We used the scale developed by Tierney et al. (1999), with supervisors rating their subordinates’ creativity. This scale is commonly used to measure employee creativity in organizational behavior research and has demonstrated good reliability and validity (e.g., Grant & Berry, 2011; Gumusluoglu & Ilsev, 2009). The 9-item scale includes items such as supervisors rating the extent to which employees “demonstrate originality in their work” and “propose creative and actionable ideas at work.” In this study, ICC(1) was 0.06 and ICC(2) was 0.27, indicating creativity was appropriate for individual-level analysis. Cronbach’s alpha was 0.87.

**Control variables.** Following previous research, we controlled for employees’ gender, age, education level, marital status, and tenure (see Hornung, Rousseau, & Glaser, 2008; Ho & Kong, 2015).

### 2.3 Confirmatory Factor Analysis

To ensure adequate discriminant validity among variables, we conducted confirmatory factor analysis on all major variables (idiosyncratic deals, competence need satisfaction, autonomy need satisfaction, relatedness need satisfaction, workload, proactive career behavior, creativity). Following the theoretical dimensions of the scales, idiosyncratic deals comprised three first-order factors (development-based, flexibility-based, and task-based provisions), and proactive career behavior comprised four first-order factors (career planning, skill development, career consultation, and networking). The results are shown in Table 1.

As shown in Table 1, compared to alternative models, the hypothesized seven-factor model with two second-order factors (idiosyncratic deals, proactive career behavior) and five first-order factors (competence need satisfaction, autonomy

need satisfaction, relatedness need satisfaction, workload, creativity) demonstrated the best fit indices, indicating good discriminant validity among the seven variables and representing seven distinct constructs.

**Table 1. Confirmatory Factor Analysis Results**

Model	RMSEA
Seven-factor model	
Five-factor model	
Four-factor model	
Three-factor model	
Two-factor model	
Single-factor model	

*Note: (1)  $N = 230$ ; (2)  $\Delta^2$  was obtained by subtracting  $\chi^2$  of the seven-factor model from alternative models;  $\Delta df$  was obtained by subtracting  $df$  of the seven-factor model from alternative models; (3) Seven-factor model: idiosyncratic deals, workload, competence need satisfaction, autonomy need satisfaction, relatedness need satisfaction, proactive career behavior, creativity; Five-factor model: merged competence, autonomy, and relatedness need satisfaction into one factor; Four-factor model: merged idiosyncratic deals and the three need satisfaction variables into one factor; Three-factor model: merged idiosyncratic deals, workload, and the three need satisfaction variables into one factor; Two-factor model: merged proactive career behavior and creativity into one factor based on the three-factor model; Single-factor model: merged all variables into one factor.*

## 2.4 Preliminary Analysis

To determine whether all demographic variables (age, gender, marital status, tenure, education level) needed to be included in hypothesis testing, we conducted preliminary model tests. First, in correlation analyses, except for gender being significantly correlated with proactive career behavior and tenure being significantly correlated with autonomy need satisfaction, the other three control variables showed no significant relationships with dependent variables. Second, we used regression models to examine the effects of potential control variables on all dependent variables. Regression results showed that gender and tenure had significant effects on proactive career behavior, tenure had a significant effect on autonomy need satisfaction, and age had a significant effect on creativity, while marital status and education level had no significant effects on any dependent variables. Since removing unnecessary control variables can effectively avoid reducing statistical power (Becker, 2005), we included only age, gender, and tenure as control variables in hypothesis testing.

### 3. Results

#### 3.1 Descriptive Statistics

Means, standard deviations, and Pearson correlations for all variables are summarized in Table 2. As shown, idiosyncratic deals were positively correlated with competence need satisfaction ( $r = 0.21, p < 0.01$ ), autonomy need satisfaction ( $r = 0.26, p < 0.01$ ), relatedness need satisfaction ( $r = 0.14, p < 0.05$ ), proactive career behavior ( $r = 0.48, p < 0.01$ ), and creativity ( $r = 0.25, p < 0.01$ ). Competence need satisfaction was positively correlated with proactive career behavior ( $r = 0.35, p < 0.01$ ) and creativity ( $r = 0.26, p < 0.01$ ). Autonomy need satisfaction was positively correlated with proactive career behavior ( $r = 0.36, p < 0.01$ ) and creativity ( $r = 0.17, p < 0.05$ ). Relatedness need satisfaction was positively correlated with proactive career behavior ( $r = 0.33, p < 0.01$ ) and creativity ( $r = 0.19, p < 0.01$ ). These correlations provide preliminary support for our hypotheses.

**Table 2. Means, Standard Deviations, Reliabilities, and Correlations Among Main Variables**

*Note:*  $N = 230$ ;  $p < 0.05$ , \*\*  $p < 0.01$ ; Cronbach's alpha coefficients are shown in parentheses on the diagonal.\*

#### 3.2 Data Analysis Methods for Hypothesis Testing

We used Mplus 7.4 to test hypotheses by estimating three separate models. In Model 1, we estimated the effects of idiosyncratic deals on the three mediators (competence, autonomy, and relatedness need satisfaction) and the two outcomes (proactive career behavior and creativity), while controlling for the effects of control variables on these variables.

In Model 2, we added the effects of the three need satisfaction variables on proactive career behavior and creativity. Based on Model 2's regression coefficients, we calculated bootstrap confidence intervals (5,000 resamples) to estimate the significance of indirect effects of idiosyncratic deals on proactive career behavior and creativity through each type of need satisfaction.

In Model 3, we added interaction terms between the centered independent variable (idiosyncratic deals) and moderator (workload) as predictors of the mediators and outcomes. We again used bootstrap confidence intervals (5,000 resamples) to test the moderating effects of workload on the proposed mediation mechanisms. Additionally, following Cohen et al. (2003), we plotted the moderation effects at different workload levels (+1/-1 SD).

#### 3.3 Hypothesis Testing Results

We used Mplus 7.4 to estimate unstandardized coefficients, with results summarized in Tables 3, 4, and 5. As shown in Model 1 of Table 3, idiosyncratic deals significantly promoted proactive career behavior ( $B = 0.36, p < 0.01$ ) and

creativity ( $B = 0.22, p < 0.01$ ). Thus, Hypotheses 1a and 1b were supported. Additionally, Model 2 in Table 4 shows that idiosyncratic deals had significant positive effects on competence need satisfaction ( $B = 0.16, p < 0.01$ ), autonomy need satisfaction ( $B = 0.21, p < 0.01$ ), and relatedness need satisfaction ( $B = 0.10, p < 0.05$ ). Therefore, Hypotheses 2a, 2b, and 2c were all supported.

We tested mediation hypotheses using 5,000 bootstrap confidence intervals. Results showed that the indirect effect of idiosyncratic deals on proactive career behavior through competence need satisfaction was 0.025, with a 95% bootstrap confidence interval of [0.008, 0.051] (excluding zero), indicating significant mediation. The indirect effect on creativity through competence need satisfaction was 0.036, with a 95% confidence interval of [0.009, 0.083] (excluding zero), also indicating significant mediation. Thus, Hypotheses 3a and 4a were supported.

However, the indirect effect of idiosyncratic deals on proactive career behavior through autonomy need satisfaction was 0.016, with a 95% confidence interval of [-0.009, 0.050] (including zero), indicating non-significant mediation. The indirect effect on creativity through autonomy need satisfaction was 0.000, with a 95% confidence interval of [-0.036, 0.032] (including zero), also non-significant. Therefore, Hypotheses 3b and 4b were not supported.

The indirect effect on proactive career behavior through relatedness need satisfaction was 0.015, with a 95% confidence interval of [0.000, 0.039] (excluding zero but very weak). The indirect effect on creativity through relatedness need satisfaction was 0.006, with a 95% confidence interval of [-0.007, 0.038] (including zero), indicating non-significant mediation. Thus, Hypotheses 3c and 4c were not supported.

As shown in Model 4 of Table 5, workload significantly moderated the effects of idiosyncratic deals on competence need satisfaction ( $B = 0.22, p < 0.01$ ) and autonomy need satisfaction ( $B = 0.18, p < 0.05$ ), but did not significantly moderate the effect on relatedness need satisfaction ( $B = -0.05, p > 0.05$ ). Following Cohen et al. (2003), we plotted these moderation effects in Figures 2 [Figure 2: see original paper] and 3 [Figure 3: see original paper]. Figure 2 shows that when workload was low (-1 SD), the effect of idiosyncratic deals on competence need satisfaction was non-significant ( $B = 0.06, p > 0.05$ ); when workload was high (+1 SD), the effect was significantly positive ( $B = 0.32, p < 0.01$ ). Figure 3 shows that when workload was low (-1 SD), the effect of idiosyncratic deals on autonomy need satisfaction was weaker ( $B = 0.13, p < 0.05$ ); when workload was high (+1 SD), the effect was stronger ( $B = 0.35, p < 0.01$ ). Therefore, Hypotheses 5a and 5b were supported, while Hypothesis 5c was not.

We also tested moderated mediation hypotheses using bootstrap confidence intervals. Results from 5,000 bootstrap samples showed that workload significantly moderated the indirect effect of idiosyncratic deals on proactive career behavior through competence need satisfaction ( $B = 0.033, 95\% \text{ CI} = [0.008, 0.077]$ ). Specifically, when workload was low (-1 SD), the indirect effect was 0.009, 95% CI = [-0.010, 0.037] (including zero, non-significant); when work-

load was high (+1 SD), the indirect effect was 0.049, 95% CI = [0.020, 0.095] (excluding zero, significant); the difference was 0.039, 95% CI = [0.009, 0.091] (excluding zero, significant). Thus, Hypothesis 6a was supported.

Workload also significantly moderated the indirect effect of idiosyncratic deals on creativity through competence need satisfaction ( $B = 0.039$ , 95% CI = [0.003, 0.103]). When workload was low (-1 SD), the indirect effect was 0.011, 95% CI = [-0.008, 0.052] (including zero, non-significant); when workload was high (+1 SD), the indirect effect was 0.057, 95% CI = [0.007, 0.129] (excluding zero, significant); the difference was 0.046, 95% CI = [0.003, 0.121] (excluding zero, significant). Therefore, Hypothesis 7a was also supported.

However, workload did not significantly moderate the indirect effects through autonomy need satisfaction on either proactive career behavior ( $B = 0.016$ , 95% CI = [-0.005, 0.053]) or creativity ( $B = 0.015$ , 95% CI = [-0.013, 0.058]). Thus, Hypotheses 6b and 7b were not supported.

Similarly, workload did not significantly moderate the indirect effects through relatedness need satisfaction on proactive career behavior ( $B = -0.008$ , 95% CI = [-0.054, 0.020]) or creativity ( $B = -0.003$ , 95% CI = [-0.051, 0.011]). Therefore, Hypotheses 6c and 7c were not supported.

### **Table 3. Regression Results for Idiosyncratic Deals on Psychological Needs Satisfaction, Proactive Career Behavior, and Creativity**

*Note:*  $N = 230$ ;  $p < .05$ , \*\*  $p < .01$ .\*

### **Table 4. Regression Results for Idiosyncratic Deals and Need Satisfaction on Proactive Career Behavior and Creativity**

*Note:*  $N = 230$ ;  $p < .05$ , \*\*  $p < .01$ .\*

### **Table 5. Moderating Effects of Workload on Relationships Among Idiosyncratic Deals, Psychological Needs Satisfaction, Proactive Career Behavior, and Creativity**

*Note:*  $N = 230$ ;  $p < .05$ , \*\*  $p < .01$ .\*

## **4. Discussion and Conclusion**

This study examined the mechanisms through which idiosyncratic deals influence employee proactive career behavior and creativity based on self-determination theory. The findings reveal that i-deals enhance satisfaction of all three basic psychological needs (competence, autonomy, and relatedness) and directly promote proactive career behavior and creativity. Competence need satisfaction mediates the relationship between i-deals and both proactive career behavior and creativity. Furthermore, workload positively moderates the relationships between i-deals and competence/autonomy need satisfaction, as well as the mediating effect of i-deals on proactive career behavior and creativity through competence need satisfaction. These results provide theoretical and

practical implications for research on i-deals and employee proactive career behavior and creativity.

#### 4.1 Theoretical Contributions

This study makes three main theoretical contributions. First, it extends research on i-deals from a self-determination theory perspective by examining the effects of i-deals on psychological needs satisfaction and the indirect effects on proactive career behavior and creativity through needs satisfaction. This responds to Liao et al.'s (2016) call to “explore motivations beyond social exchange for i-deals recipients,” providing a new perspective for i-deals research. Results show that i-deals significantly predict all three basic psychological needs and that competence need satisfaction mediates the effects on proactive career behavior and creativity. These findings support conceptualizing i-deals as an informational external environment and demonstrate the applicability of self-determination theory to i-deals research.

Second, this study enriches research on outcomes of i-deals. Results demonstrate that i-deals effectively promote proactive career behavior and creativity, particularly when workload is high, strengthening the mediating role of competence need satisfaction. These findings not only expand the range of i-deals outcomes but also enrich antecedents and boundary conditions for proactive career behavior and creativity. Unlike previous research based primarily on social exchange theory that focused on reciprocation behaviors requiring individual adaptation (e.g., organizational commitment; Hornung et al., 2008), this study links negotiated i-deals to proactive career behavior and creativity from a self-determination theory perspective, further enriching and extending theoretical knowledge in the i-deals domain.

Third, this study more deeply examines how interactions between different environmental features affect psychological needs satisfaction and behavioral outcomes. Specifically, i-deals negotiated between organizations and employees serve as an informational environment that enhances employee participation and decision-making (Deci & Ryan, 2000, 2004; Zhang et al., 2010) and represents a key job resource for coping with work pressures and challenges. Our findings show that this key resource's utility is maximized when employees face higher work challenges—that is, higher workload levels. Therefore, by focusing on both job resources and work stress features in the external environment, this study further extends self-determination theory, providing more nuanced theoretical insights regarding external environments and offering empirical support for Deci's (1975) hypothesis that challenging work environments strengthen psychological needs satisfaction.

#### 4.2 Practical Implications

This study offers practical implications. First, regarding the effects and mechanisms of i-deals, contemporary organizational management and job resource

allocation should scientifically and reasonably design jobs (e.g., through i-deals) that provide employees with personalized task responsibilities, training opportunities, and appropriate autonomy, which are crucial for satisfying basic psychological needs and motivating self-improvement and innovative behaviors. Second, regarding the moderating effect of workload, organizations should scientifically understand and skillfully utilize pressure factors to mitigate negative impacts while promoting the effectiveness of job resources and informational environments.

### 4.3 Limitations and Future Directions

First, although i-deals enhanced all three psychological needs, the mediating roles of autonomy and relatedness need satisfaction were not supported. This may be related to sample characteristics, work environments, and cultural contexts (Ryan & Deci, 2000). Ryan and Deci (2000) note that basic psychological needs theory is cross-situational and cross-cultural, but different contexts and sample characteristics affect its application and research conclusions. For example, Reinboth and Duda (2006) found that relatedness need satisfaction did not affect behavioral tendencies in competitive work situations. Chinese scholar Yang et al. (2018) also found that humble leadership enhanced task performance through competence need satisfaction but not through relatedness or autonomy need satisfaction.

In this study, several factors may explain these findings. First, our Chinese sample, influenced by Eastern culture, may not value “autonomy” as much as Western concepts, limiting the effect of autonomy need satisfaction on work behaviors. Second, employees seeking autonomy may focus more on work-life balance rather than investing greater effort in work (Hornung et al., 2008). Third, research shows that in competitive environments, individuals are more sensitive to valuable information feedback or incentives, and competence need satisfaction has a stronger effect on intrinsic motivation than autonomy or relatedness need satisfaction (Reinboth & Duda, 2006). Future research could collect samples from different work backgrounds and social environments or examine additional outcomes of i-deals to further enrich theoretical knowledge.

Second, this study focused on external work environments (i-deals and workload levels) but lacked examination of individual factors in this process. Given that person-environment (P-E) fit also influences employee attitudes and behaviors (Kristof-Brown, Zimmerman, & Johnson, 2005), individual personality traits and values may affect reactions to informational environments and job characteristics (Parker, Jimmieson, & Amiot, 2010, 2013). Future research could incorporate individual characteristics (e.g., proactive personality, self-efficacy) to more deeply examine the applicability of i-deals for different individuals.

Finally, this study treated i-deals as a unified construct to examine its effects, mechanisms, and boundary conditions. However, i-deals is a multi-dimensional construct comprising different content dimensions that may have different effects

or mechanisms on employee behavior. Future research could examine the effects of different i-deals dimensions to further expand theoretical knowledge.

#### 4.4 Conclusion

This study examined the effects of idiosyncratic deals on psychological needs satisfaction, proactive career behavior, and creativity and their boundary conditions within the self-determination theory framework. Results show that i-deals, as an informational external environment and important job resource, enhance competence, autonomy, and relatedness need satisfaction, thereby promoting proactive career behavior and creativity. Compared to low workload situations, when employees face higher workload, i-deals have stronger positive effects on psychological needs satisfaction (particularly competence and autonomy), and the indirect effects of i-deals on proactive career behavior and creativity through competence need satisfaction are also stronger.

#### References

- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, 40(1), 39–58.
- Anand, S. (2012). *Multi-level examination of idiosyncratic deals: Antecedents and consequences* (Doctoral dissertation). The University of Illinois at Chicago.
- Anand, S., Vidyarthi, P. R., Liden, R. C., & Rousseau, D. M. (2010). Good citizens in poor-quality relationships: Idiosyncratic deals as a substitute for relationship quality. *Academy of Management Journal*, 53(5), 970–988.
- Bakker, A. B., Van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control model: Thriving on high job demands and resources. *Journal of Personnel Psychology*, 9(1), 3–16.
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8, 274–289.
- Claes, R., & Ruiz-Quintanilla, S. A. (1998). Influences of early career experiences, occupational group, and national culture on proactive career behavior. *Journal of Vocational Behavior*, 52(3), 357–378.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.

Deci, E. L., & Ryan, R. M. (2004). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.

Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology, 49*(1), 14–23.

Eisenberger, R., & Aselage, J. (2009). Incremental effects of reward on experienced performance pressure: Positive outcomes for intrinsic interest and creativity. *Journal of Organizational Behavior, 30*(1), 95–117.

Goh, Z. W., Ilies, R., & Wilson, K. S. (2015). Supportive supervisors improve employees' daily lives: The role supervisors play in the impact of daily workload on life satisfaction via work-family conflict. *Journal of Vocational Behavior, 89*, 65–73.

Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Academy of Management Journal, 54*(1), 73–96.

Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research, 62*(4), 461–473.

Han, Y., Liao, J. Q., & Long, L. R. (2007). Model of development and empirical study on employee job performance construct. *Journal of Management Sciences in China, 10*(5), 62–77.

Ho, V. T., & Kong, D. T. (2015). Exploring the signaling function of idiosyncratic deals and their interaction. *Organizational Behavior and Human Decision Processes, 131*, 149–161.

Hornung, S., Rousseau, D. M., & Glaser, J. (2008). Creating flexible work arrangements through idiosyncratic deals. *Journal of Applied Psychology, 93*(3), 655–664.

Hornung, S., Rousseau, D. M., Glaser, J., Angerer, P., & Weigl, M. (2010). Beyond top-down and bottom-up work redesign: Customizing job content through idiosyncratic deals. *Journal of Organizational Behavior, 31*(2–3), 187–215.

Hornung, S., Rousseau, D. M., Glaser, J., Angerer, P., & Weigl, M. (2011). Employee-oriented leadership and quality of working life: Mediating roles of idiosyncratic deals. *Psychological Reports, 108*(1), 59–74.

Huang, J. T., & Hsieh, H. H. (2015). Supervisors as good coaches: Influences of coaching on employees' in-role behaviors and proactive career behaviors. *International Journal of Human Resource Management, 26*(1), 42–58.

Ilies, R., Dimotakis, N., & Pater, I. E. D. (2010). Psychological and physiological reactions to high workloads: Implications for well-being. *Personnel Psychology, 63*(2), 407–436.

Ilies, R., Schwind, K. M., Wagner, D. T., Johnson, M. D., DeRue, D. S., & Ilgen, D. R. (2007). When can employees have a family life? The effects of

daily workload and affect on work-family conflict and social behaviors at home. *Journal of Applied Psychology*, *92*(5), 1368–1379.

Jokisaari, M., & Nurmi, J. E. (2009). Change in newcomers' supervisor support and socialization outcomes after organizational entry. *Academy of Management Journal*, *52*(3), 527–544.

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, *58*(2), 281–342.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, *79*(3), 367–384.

LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge stressor-hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, *48*(5), 764–775.

Liao, C., Wayne, S. J., & Rousseau, D. M. (2016). Idiosyncratic deals in contemporary organizations: A qualitative and meta-analytical review. *Journal of Organizational Behavior*, *37*, S9–S29.

Liu, J., Huang, B., Sheng, X. F., Wang, Y., & Yu, X. T. (2018). Employee's proactive career behaviors: The new path for transcending career boundary. *Human Resources Development of China*, *35*, 129–140.

Lü, X., Fan, Y., Zhang, J., & Li, C. X. (2016). How proactive personality effects on in-role performance: The influence of idiosyncratic deals and individual innovation behavior. *Science of Science and Management*, *37*, 170–180.

Nifadkar, S., Tsui, A. S., & Ashforth, B. E. (2012). The way you make me feel and behave: Supervisor-triggered newcomer affect and approach-avoidance behavior. *Academy of Management Journal*, *55*(5), 1146–1168.

Nielsen, R., Marrone, J. A., & Slay, H. S. (2010). A new look at humility: Exploring the humility concept and its role in socialized charismatic leadership. *Journal of Leadership & Organizational Studies*, *17*(1), 33–43.

Ohly, S., & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity, and proactive behavior: A multi-level study. *Journal of Organizational Behavior*, *31*, 543–565.

Owens, B. P., & Hekman, D. R. (2012). Modeling how to grow: An inductive examination of humble leader behaviors, contingencies, and outcomes. *Academy of Management Journal*, *55*(4), 787–818.

Parker, S. L., Jimmieson, N. L., & Amiot, C. E. (2010). Self-determination as a moderator of demands and control: Implications for employee strain and

engagement. *Journal of Vocational Behavior*, 76(1), 52–67.

Parker, S. L., Jimmieson, N. L., & Amiot, C. E. (2013). Self-determination, control, and reactions to changes in workload: A work simulation. *Journal of Occupational Health Psychology*, 18(2), 173–190.

Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport & Exercise*, 7(3), 269–286.

Rousseau, D. M., & Kim, T. G. (2006). When workers bargain for themselves: Idiosyncratic deals and the nature of the employment relationship. Paper presented at the British Academy of Management Conference, Belfast, Ireland.

Rousseau, D. M., Ho, V. T., & Greenberg, J. (2006). I-deals: Idiosyncratic terms in employment relationships. *Academy of Management Review*, 31(4), 977–994.

Ryan, R. M., & Deci, E. L. (2000). When rewards compete with nature: The undermining of intrinsic motivation and self-regulation. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation* (pp. 13–54). San Diego, CA: Academic Press.

Seers, A., McGee, G. W., Serey, T. T., & Graen, G. B. (1983). The interaction of job stress and social support: A strong inference investigation. *Academy of Management Journal*, 26(2), 273–284.

Strauss, K., Griffin, M. A., & Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *The Journal of Applied Psychology*, 97(3), 580–598.

Taber, B. J., & Blankemeyer, M. (2015). Future work self and career adaptability in the prediction of proactive career behaviors. *Journal of Vocational Behavior*, 86, 20–27.

Tierney, P., & Farmer, S. M. (2004). The Pygmalion process and employee creativity. *Journal of Management*, 30(3), 413–432.

Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, 52(3), 591–620.

Wang, A. C., & Cheng, B. S. (2010). When does benevolent leadership lead to creativity? The moderating role of creative role identity and job autonomy. *Journal of Organizational Behavior*, 31(1), 106–121.

Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology*, 98(2), 222–244.

Yang, C., Yang, F., Jing, Y., & Tang, M. F. (2018). How humble leadership enhances employee performance: The mediating role of psychological need sat-

isfaction and moderating role of work unit structure. *Nankai Business Review*, 21(2), 121–134.

Zhang, J., Zhang, J. B., Li, Y., & Deci, E. L. (2010). An effective path for promoting work motivation: The self-determination theory perspective. *Advances in Psychological Science*, 18(5), 752–759.

Zhang, M., Ye, M. L., Peng, J., & Chen, Y. S. (2016). Future work self: Concept, measurement and related research. *Advances in Psychological Science*, 24(5), 794–803.

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