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Maintaining job crafting over time: joint effect of autonomy and career support from family and friends

Zhonghao Wang and Jason L. Huang
School of Human Resources and Labor Relations, Michigan State University, East Lansing, Michigan, USA, and
Baoguo Xie
School of Management, Wuhan University of Technology, Wuhan, China and Research Institute of Digital Governance and Management Decision Innovation, Wuhan University of Technology, Wuhan, China

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Abstract

Purpose – The study focuses on intraindividual trajectory of job crafting change over time. Integrating the self-regulation and demands-resources perspectives, this study examines how career support from family and friends interacts with job autonomy to influence the change pattern of job crafting.

Design/methodology/approach – Four waves of self-report survey data were collected in a semester from 324 university professors and instructors in China. Latent growth curve modeling was used to examine intraindividual change of job crafting and conducted latent interaction analysis to test the joint effect of autonomy and career support from family and friends on job crafting change.

Findings – There was a general declining trend in job crafting over the course of a semester. Career support from family and friends moderated the association between job autonomy and job crafting maintenance. Specifically, when career support was low, job autonomy was negatively associated with job crafting maintenance.

Research limitations/implications – The study showed that job crafting maintenance over time is distinct from the typical between-person conceptualization. Further, job crafting maintenance was predicted from a self-regulatory perspective. However, the unique context of college faculty from China may limit generalization of the findings.

Practical implications – Managers should recognize the challenges in maintaining job crafting over time. In addition to providing autonomy at work, organizations may benefit from establishing channels for employees to receive career support from non-work domains.

Originality/value – The authors adopt a self-regulation perspective to understand intraindividual change in job crafting over time and situate the current investigation in the cyclical nature of university faculty's job.

Keywords Job crafting, Intraindividual change, Job autonomy, Career support from family and friends

Paper type Research paper

Introduction

There is increasing attention to job crafting in career (Akkermans and Kubasch, 2017). Job crafting refers to self-initiated changes that employees make to their jobs (Tims *et al.*, 2012; Wrzesniewski and Dutton, 2001). By altering the cognitive, task, and relational boundaries at work (Wrzesniewski and Dutton, 2001), job crafters can increase job resources, seek job challenges, and reduce job demands, thereby ensuring person-job fit and balance between job demands and resources (Petrou *et al.*, 2012; Tims *et al.*, 2013, 2016). Exerting such proactivity in the workplace has been shown to have desirable outcomes: Job crafting is positively related to work engagement (e.g. Bakker *et al.*, 2012), task performance (e.g. Gordon *et al.*, 2015), extra-role behavior (e.g. Demerouti *et al.*, 2015b), and career success (Akkermans and Tims, 2017). Despite these advances, a preponderance of studies on this topic has focused on job crafting

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as a stable between-person phenomenon. That is, job crafting is usually studied as individuals' concurrent effort in making changes to their jobs (e.g. Demerouti *et al.*, 2015a; Hakanen *et al.*, 2018; Plomp *et al.*, 2016). Such a focus stands in sharp contrast with the early conceptualization of job crafting as an iterative process that "unfolds over time" (Wrzesniewski and Dutton, 2001, pp. 194–195).

Several mechanisms may lead employees to change their job crafting efforts over time. Employees oftentimes have to deal with complex and changing work demands that require them to adapt to new tasks and responsibilities (Jundt *et al.*, 2015), which constrain their ability to sustain job crafting behavior over time. Initiating changes to one's job may also challenge the status quo and even cause disruptions in others' work, drawing pushbacks from others (Berg *et al.*, 2013). Furthermore, individuals' attempts to broaden their job roles may increase extra-role behaviors (Morgeson *et al.*, 2005) that can compete for valuable resources available for further job crafting. Therefore, it can be challenging to sustain effort over time to implement meaningful changes to the job for one's career advancement. As a result, the pattern of job crafting maintenance can differ across individuals: Some increase effort in job crafting, some keep it at a stable level, and others experience decrease in job crafting over time.

Attending to how employees sustain job crafting over time can offer an accurate account of the iterative process individuals engage in to modify their work, thus enabling "scientific examinations of the complexities involved in the change process" (Chan, 1998, p. 422). From a practical standpoint, when individuals are at different stages of their job crafting trajectories, examining job crafting at the between-person level of analysis can even lead to erroneous conclusions. So far, only two published studies examined longitudinal changes in job crafting: Petrou *et al.* (2018) showed that changes in job crafting tied to promotion focus facilitated work engagement and adaptivity, and Dubbelt *et al.* (2019) found that changes in job crafting, in the form of seeking resources, benefitted work engagement, task performance, and career satisfaction.

We thus aim to add to this emerging body of research by adopting a self-regulatory perspective (Forgas *et al.*, 2009; Gailliot *et al.*, 2008) to investigate how individuals maintain job crafting over time (i.e. *job crafting maintenance*). Given the difficulty in sustaining change efforts on the job, individuals would need to monitor available opportunities at work to craft, assess where they are in relation to desired fit with their jobs, and regulate subsequent levels of job crafting. Examining *intraindividual* change of job crafting over time can reveal whether individuals exert persistent effort in redesigning their jobs or simply withdraw from such effort after initial attempts (Bruning and Campion, 2018). Identifying change patterns of the job crafting process will also enable a richer understanding of factors that facilitate continuous engagement in job crafting over time.

As sustained self-regulation in job crafting (Porath and Bateman, 2006) can consume personal resources and lead to exhaustion, available resources and motivational factors can help support self-regulation over time (Baumeister *et al.*, 1998; De Witt Huberts *et al.*, 2014; Kanfer and Ackerman, 1989). We focus on autonomy as a key structural job resource that opens up opportunities for maintaining job crafting (Bakker and Demerouti, 2007; Demerouti *et al.*, 2001). Further, we identify career support from family and friends as a motivational factor that directs employees' sustained attention and effort to job crafting in times of need (Jenkins and Jeske, 2017; Parker *et al.*, 2004; Young and Perrewé, 2000). Together, we investigate the joint effect of autonomy and career support on the maintenance of job crafting over time.

In sum, this study aims to make two critical contributions to job crafting in career research. First, we bridge the gap in intraindividual trajectory of job crafting change by conceptualizing job crafting maintenance as a self-regulatory process that unfolds over time. Second, we examine the influence of cross-domain resource interaction on job crafting maintenance.

Hypothesis development

Researchers have proposed two basic approaches to understand job crafting. Wrzesniewski and Dutton (2001) described job crafting as redefining work roles with "physical and cognitive

changes individuals make in the task or relational boundaries of their work" (p. 179). They conceptualize job crafting from a motivational perspective with focus on human's underlying motives for control over job, work meaning, creation of positive self-image, and connection with others. In contrast, Tims *et al.* (2012) incorporated the job demands-resources model with an emphasis on modifying job demands and resources via job crafting, where job crafters can increase structural and social job resources, increase challenging job demands, and decrease hindering job demands. Taken together, job crafting illustrates individuals' creative and improvised effort in sustaining the meaning of their work regarding what they want to do (i.e. motivational perspective) and ought to do (i.e. demand-resource perspective).

Two characteristics of job crafting are noteworthy. First, regarding what job crafters want to do, job crafting is proactive. The key attributes of proactive behaviors are self-initiative in taking control, making changes, and anticipating future consequences (Grant and Parker, 2009; Parker *et al.*, 2010; Parker and Collins, 2010). Rather than following a top-down work design approach of defining job contents, job crafters take actions in shaping, molding, and redesigning their jobs (Wrzesniewski and Dutton, 2001). Second, regarding what job crafters ought to do, job crafting is adaptive. Job crafters make adaptive adjustments in response to perceived challenges at work (Berg *et al.*, 2010). This continuous process of crafting resembles adaptive activities in learning about the environment, adjusting behaviors, and achieving fit to changing situations (Chan, 2000).

Given the proactive and adaptive nature of job crafting, we integrate the demands-resources and motivational perspectives of job crafting to investigate job crafting maintenance. When initiating changes to their jobs, individuals need to first identify discrepancies between current work and desired goals. That is, misfit in one's preferred and actual work environments triggers motivation to craft (Dust and Tims, 2020). After initial attempts, individuals may evaluate the effectiveness of job crafting and decide on subsequent actions. Meanwhile, job crafters would iteratively use available resources, modify their effort level, and adapt their crafting behaviors (Berg *et al.*, 2010; Wrzesniewski and Dutton, 2001) to reduce the discrepancy between desired goals and current status (see Karoly, 1993; Lord *et al.*, 2010). Employees with motivation and sufficient resources at work would thus be able to maintain job crafting effort to achieve crafting goals via self-regulatory process. We regard this self-regulatory job crafting as *job crafting maintenance*, which manifests in intraindividual change trajectory of job crafting. Whereas job crafting level at a specific time reflects a static depiction of the intensity of one's crafting behaviors, job crafting maintenance is conceptually distinct in that it captures the within-person trend in sustaining one's effort level of job crafting over time.

One potential source of variation in job crafting is the cyclical nature of certain jobs that creates fluctuating job demands and influences employee behaviors (Davis *et al.*, 2009). For example, workers in ski resorts usually witness peaking work demands at certain time of the year with influx of tourists (Lundberg *et al.*, 2009); manufacturing workers often experience "feast or famine situations" (Davis *et al.*, 2009, p. 320) of workload following the cycle of customers' needs. We place our investigation in the specific work context of university faculty, who often experience competing demands in teaching, mentoring, publishing, and fund seeking (Watts and Robertson, 2011). The demands are exacerbated by high workload, time constraint, and lack of guidance and feedback (Gillespie *et al.*, 2001; Montgomery and Rupp, 2005). More importantly, university faculty's work is cyclical in nature, coinciding with the beginning and end of a semester. At the start of a semester, teaching responsibilities have yet to intensify, and faculty's cognitive resources are likely replenished during the break before the semester begins (see Sonnentag, 2003). The available cognitive resources enable college faculty members to engage in job crafting early in the semester. In contrast, as the semester progresses, teaching responsibilities heighten (e.g. grading, providing feedback to students), and competing demands for their time ensue. As a result, faculty members may

have to reduce effort in job crafting. Indeed, variations in job demands can consume individuals' limited job and cognitive resources that are essential for self-regulatory activities (Baumeister *et al.*, 1998; Kanfer and Ackerman, 1989). In sum, whereas the start of the semester offers ample opportunities for job crafting, it can become challenging to sustain it later in the semester.

H1. In general, college faculty members' job crafting levels decrease over the course of a semester.

After examining the average trend in job crafting maintenance over time in the hypothesis above, we turn to individual difference in change patterns. That is, some individuals may be better able to maintain job crafting than others. Two recent studies reveal the importance of maintaining job crafting over time. Petrou *et al.* (2018) examined job crafting change in 368 police officers when the police force was experiencing organizational changes. Officers who maintained job crafting in the form of seeking resources and challenges had better work engagement and adaptivity, respectively. In a sample of university employees, Dubbelt *et al.* (2019) found that changes in seeking resources over a six-month period were associated with subsequent work engagement, task performance, and career satisfaction.

We focus on job autonomy as a relatively stable characteristic of the work environment (Morgeson and Humphrey, 2006) that enables college faculty members to sustain job crafting over time. With high degree of autonomy at work, individuals enjoy the freedom to make decisions about their work (Hackman and Oldham, 1975) and exert their discretion (Parker and Wall, 1998). Meta-analytic evidence suggests autonomy can promote job crafting levels ($\rho = 0.28$, Rudolph *et al.*, 2017). Given the pivotal role autonomy plays in promoting self-regulation (Legault and Inzlicht, 2013; Ryan and Deci, 2006), we expect job autonomy to provide continuous support for job crafting maintenance for three reasons. First, having more freedom of choice in one's work decisions is less likely to deplete personal resources (Moller *et al.*, 2006) that otherwise could be devoted to maintaining job crafting over time. Second, having higher level of autonomy will enable individuals to apply proactive control over their work environment that is consistent with their own values and predilections (Sheldon and Elliot, 1999; Wu *et al.*, 2018). Finally, high autonomy may lead individuals to have a greater sense of agency in general (Wu *et al.*, 2015), thus increasing their job crafting effort over time. Therefore, we propose:

H2. Job autonomy is positively related to job crafting maintenance.

Considering employees can optimize their use of job autonomy when receiving social resources for career development (Jiang *et al.*, 2020), we further propose that career support from family and friends can interact with autonomy to influence job crafting maintenance. With high autonomy at work, employees also need to be motivated to assess and utilize opportunities for job crafting (Wrzesniewski and Dutton, 2001); otherwise, they may not necessarily utilize autonomy for the purpose of job crafting maintenance but could instead choose to focus on other work tasks. As working adults have multiple roles in their social life (Frone, 2003), social support from the non-work domain provides a unique source of motivation to help sustain employees' focus of self-regulation on job crafting (Anderson *et al.*, 2006; Wills and Bantum, 2012). Similar to the preponderance of studies on this topic, we conceptualize career support from family and friends as a relatively stable variable (e.g. Renn *et al.*, 2014; Parker *et al.*, 2004) that may take on instrumental and emotional forms (Blustein, 2011). Instrumental support refers to providing tangible assistance, such as aid, advice, and relevant knowledge, whereas emotional support refers to showing care, concerns, and sympathy (Fenlason and Beehr, 1994). In instrumental use of career support, individuals with high job autonomy are more likely to follow advice and suggestions from family and friends, thus making more efficient use of their available job crafting opportunities (Stiglbauer and

Kovacs, 2018). Friends and family can provide career-related emotional support (Cohen and Wills, 1985), thus reducing the stress and uncertainty involved in decisions about changing one's work under high autonomy. In addition, family and friends can also direct individuals' attention and effort toward future career development (Murphy and Kram, 2010), thus enabling individuals with high autonomy to sustain their job crafting efforts for long-term career gains rather than expensing their decision-making latitude on short-term goals. In contrast, with low career support from family and friends, individuals may not be as motivated to utilize job autonomy to sustain their job crafting effort and may instead turn to address other demands at work. Taken together, career support from family and friends can direct one's effort to assessing opportunities for job crafting and further taking advantage of these opportunities at work to maintain job crafting.

H3. Career support from family and friends moderates the relationship between job autonomy and job crafting maintenance, such that the relationship is more positive for those who receive more career support from family and friends.

Method

Data for this study were collected in four waves from university faculty members in China. Universities in China follow very similar academic calendars, and the four waves of surveys were collected in one semester. We solicited assistance from researchers at an academic conference, who volunteered to recruit their colleagues to participate in this study. At the beginning of the semester (Time 0), we distributed online surveys to 327 full-time university faculty. We then sent follow-up surveys with one-month intervals at Time 1, 2, and 3. Across these waves, 324 participates from 42 universities responded to at least one of the surveys. The response rate varied from 85.8% to 96.9% across four waves of surveys. The respondents ranged in age from 23 to 56 years old (Mean = 36.95, SD = 4.91), and 53% of them were males. Most respondents (80%) had a doctorate degree, and 47.8% held a title of either full or associate professor. On average, they worked at their current university for 8.39 years (SD = 5.11).

Measures

Job autonomy. Job autonomy was measured at Time 0 with 3 items ($\alpha = 0.83$) from Morgeson and Humphrey (2006) focusing on how much autonomy was given to researchers in making decisions at work. The items were based on a five-point Likert scale from 1 (*Never*) to 5 (*Often*). A sample item is "The job allows me to make a lot of decisions on my own".

Career support from family and friends. We measured career support from family and friends at Time 0 with a four-item scale ($\alpha = 0.83$) from Rottinghaus *et al.* (2012) on a five-point scale from 1 (*Never*) to 5 (*Often*) to measure perceived emotional and instrumental support from family and friends. A sample item is "I receive all the encouragement I need from others to meet my career goals".

Job crafting. Job crafting was measured at Time 1, 2, and 3 (αs = 0.72, 0.80, and 0.81, respectively). Participants were instructed to recall their crafting behavior in the past month and respond to 12 items on a six-point scale from 1 (*Never*) to 6 (*Often*). We adapted 3 items from each one of the four dimensions of job crafting based on Tims *et al.*'s (2012) job crafting scale. Items were selected for high factor loadings and fit in our study context. We also made necessary modification to item wording to accommodate the current college faculty sample. For example, we modified the item "I ask my supervisor to coach me" to "I ask *senior scholars* to coach me".

Control variables. We included the following demographic and substantive controls that may influence job crafting in this study (Rudolph *et al.*, 2017): faculty gender, organizational

tenure (in years), faculty position title, and proactive personality. Proactive personality was measured with 6 items ($\alpha = 0.76$) from Claes *et al.* (2005). A sample item is "If I see something I do not like, I fix it".

Results

We first examined the pattern of missing data using Little's (1998) missing completely at random test. The results indicated that the data were missing completely at random: $\chi^2(45) = 41.75, p = 0.61$. We used Mplus Version 8.6 (Muthén and Muthén, 1998–2021) to test our model with full information maximum likelihood estimation to deal with missing data. Given the fact that participants in this study were nested within universities, we controlled for clustering effect in our analysis and applied scaling correction for chi-square difference test when comparing models (see Satorra and Bentler, 2010) that were estimated with robust maximum likelihood. Table 1 presents descriptive statistics of all study variables.

Measurement invariance and measurement models

We assessed measurement invariance of job crafting to ensure the results of further analyses would be independent from change in measurement (Meredith and Horn, 2001; Vandenberg and Lance, 2000). Given the modest sample size relative to the number of items, we followed the internal-consistency approach (Kishton and Widaman, 1994) to create item parcels for the four underlying dimensions of job crafting (increasing structural job resources, increasing social job resources, increasing challenging job demands, and decreasing hindering job demands). Initial inspection of the factor structure of job crafting over time revealed that the hypothesized four-factor solution encountered a convergence issue, whereas a three-factor solution where increasing structural and social resources loaded on one factor fitted the data well, $\chi^2 = 4.78$, df = 15; RMSEA = 0.00, 95% CI = [0.00 0.00], CFI = 1.00, TLI = 1.00 and SRMR = 0.01. Given this three-dimensional solution is consistent with numerous empirical studies (e.g. Demerouti *et al.*, 2015a; van den Heuvel *et al.*, 2015; Petrou *et al.*, 2012), we adopted this configural model in subsequent analyses.

We followed recommended steps of longitudinal measurement invariance tests (Cheung and Lau, 2012; Vandenberg and Lance, 2000) and examined a set of progressively stringent models, including configural (same factor structures), metric (equal factor loadings), and

Variables	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Gender	0.47	0.50									
2. Organizational tenure in years	8.39	5.11	0.15								
3. Faculty position title	0.48	0.50	−0.08	0.34							
4. Proactive personality	3.44	0.61	0.01	−0.16	−0.03	*0.76*					
5. Job autonomy	3.64	0.77	−0.03	−0.01	0.10	0.29	*0.83*				
6. Career support from family and friends	3.68	0.66	0.04	−0.03	0.08	0.31	0.45	*0.83*			
7. Job crafting Time 1	4.09	0.81	−0.11	−0.06	0.15	0.37	0.32	0.35	*0.72*		
8. Job crafting Time 2	3.73	0.97	−0.11	−0.03	0.08	0.37	0.21	0.25	0.69	*0.80*	
9. Job crafting Time 3	3.79	0.95	−0.13	0.00	0.15	0.40	0.31	0.33	0.68	0.71	*0.81*

Note(s): $N = 278$–324. Correlations larger than |0.12| are all significant with $p < 0.05$. Coefficient alpha is reported in italics along the diagonal. Variable 1 to 6 were measured at Time 0

Table 1.
Descriptive statistics of study variables

scalar (equal item intercepts) invariance models (see Table 2). The result of model comparison test supported the scalar invariance model. Thus, the meaning and interpretation of job crafting measures remained the same over time. Next, we assessed a measurement model of five conceptualized latent factors (i.e. job autonomy, career support from family and friends, job crafting at three times) to ensure the measures were structurally distinct. The five-factor model showed adequate fit to the data: χ^2 (104) = 210.57, RMSEA = 0.06, 90% CI = [0.05 0.07], CFI = 0.95, TLI = 0.95 and SRMR = 0.06.

Tests of hypotheses

We first computed intraclass correlation (ICC1) to estimate the ratio of between-person variance to total variance (Bliese, 2000). The ICC1 of job crafting measures over time was 0.67, indicating that between-person variation accounted for 67% of the observed variance, leaving up to 33% of within-person variation over time. We then used latent growth curve model (Bollen and Curran, 2006) to examine the change pattern of job crafting. The model specified two between-person factors, *intercept* and *slope*, to represent the initial status and job crafting maintenance. The intercept factor indicates the initial level of job crafting; the slope factor indicates intraindividual change of job crafting over time. To better understand the change pattern of job crafting, we compared the results of three models: intercept-only, linear growth, and latent basis growth model. The intercept-only model used a single intercept factor to represent the change pattern with factor loadings constrained to 1 for all job crafting measures. The linear growth model specified an additional slope factor with fixed loadings of 0, 1, and 2 for job crafting at each time respectively. The latent basis growth model constrained the slope loading at Time 1 to be 0 and that at Time 2 to be 1, while freely estimating the loading at Time 3 (see Figure 1). We retained the latent basis growth model that best represented the change trajectory of job crafting based on model comparison results (see Table 2).

H1 predicted that job crafting levels would generally decrease over time. The results supported this hypothesis: the mean of the slope factor was −0.24 (SE = 0.03, p < 0.001), indicating a general declining trend in job crafting (see Figure 1) [1]. The covariance between intercept and slope was not significant (estimate = 0.02, SE = 0.06, p = 0.74), suggesting that job crafting maintenance was unrelated to the initial status, thus capturing a unique aspect of individuals' job crafting effort over time.

As classical chi-square goodness-of-fit test is inappropriate in detecting non-linear terms in structural equation models (Mooijaart and Satorra, 2009), we followed Asparouhov and Muthén's (2021) method to test latent interaction. We first fitted the model without the

Models	χ^2	*df*	CFI	TLI	SRMR	RMSEA [90% CI]	$\Delta\chi^2$	Δdf	*p*
Measurement invariance models									
Configural invariance	4.78	15	1.00	1.02	0.01	0.00 [0.00 0.00]			
Metric invariance	9.64	19	1.00	1.01	0.03	0.00 [0.00 0.00]	4.97	4	0.29
Scalar invariance	14.41	23	1.00	1.01	0.02	0.00 [0.00 0.02]	4.62	4	0.33
Latent growth curve models									
Intercept-only	125.97	36	0.94	0.94	0.16	0.09 [0.07 0.11]			
Linear growth	55.61	33	0.98	0.98	0.04	0.05 [0.02 0.07]	78.65	3	<0.001
Latent basis growth	19.48	32	1.00	1.01	0.02	0.00 [0.00 0.00]	34.65	1	<0.001

Note(s): N = 303. CFI = comparative fit index; TLI = Tucker–Lewis fit index; RMSEA = root mean square error of approximation; CI = confidence interval. Chi-square difference test used scaling correction for robust maximum likelihood (see Satorra and Bentler, 2010)

Table 2. Results of measurement invariance and latent growth curve models

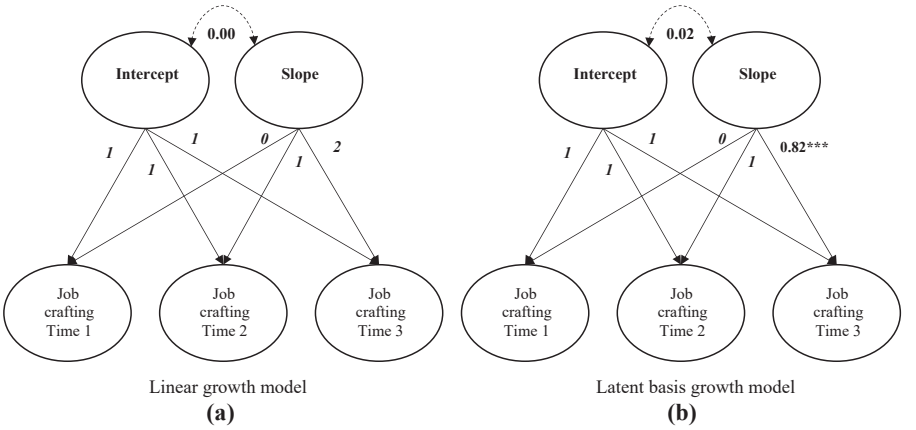

Figure 1.
Job crafting change over time

interaction term to check model fit, and then added the interaction term to assess its significance level. The main-effect-only model fitted the data well: $\chi^2(257) = 365.40$, RMSEA = 0.04, 90% CI = [0.03 0.04], CFI = 0.96, TLI = 0.96 and SRMR = 0.05. Based upon this model, we included the latent interaction between job autonomy and career support from family and friends. Model results are presented in Figure 2.

H2 predicted that job autonomy would be positively related to job crafting maintenance. However, we did not find support for H2 ($b = -0.04$, $SE = 0.04$, $p = 0.39$). H3 predicted the moderating role of career support from family and friends in the relation between job autonomy and job crafting maintenance. Consistent with the hypothesis, career support magnified the effect of job autonomy on job crafting maintenance ($b = 0.10$, $SE = 0.04$, $p = 0.03$). Interestingly, the interaction plot (Figure 3) showed that the effect of autonomy on job crafting maintenance became more negative at lower level of career support. As neither

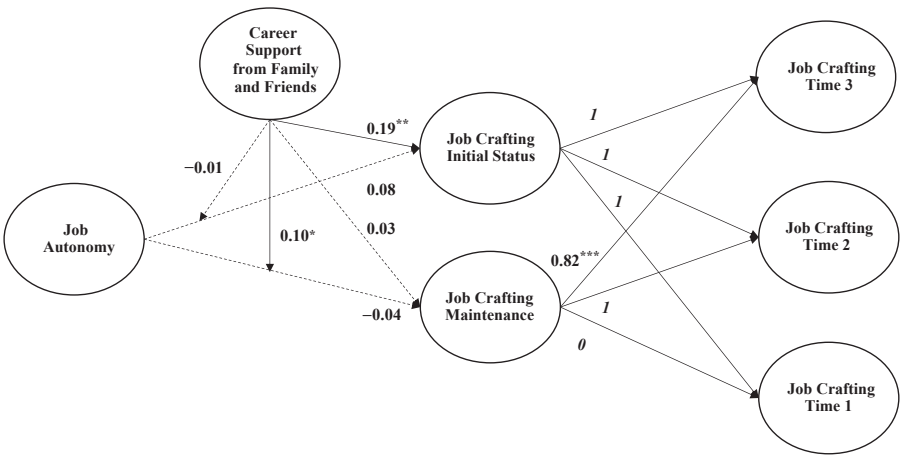

Figure 2.
Summary of model results

Note(s): $N = 324$. Estimates are unstandardized coefficients. Loadings in italics were fixed. Dashed lines indicate nonsignificant parameter estimates. Control variables are not presented in this graph for simplicity. *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$

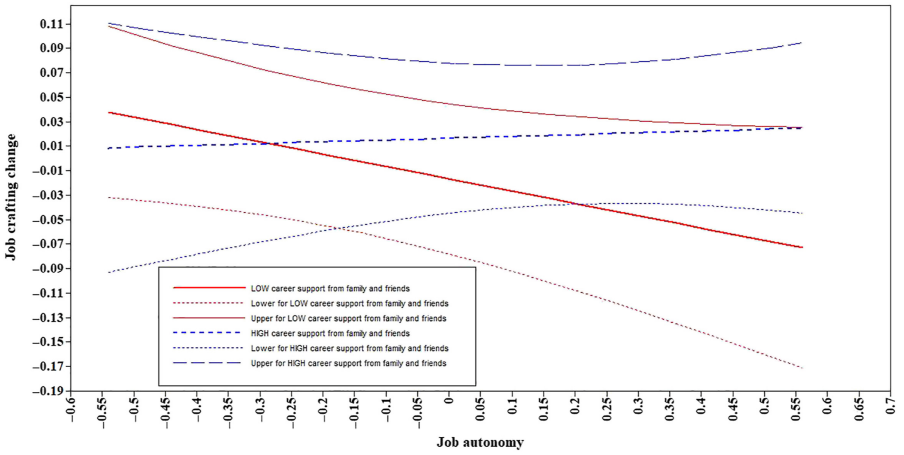

Figure 3.
Interaction between job autonomy and career support from family and friends on job crafting maintenance

simple slope was significant ($b = 0.01$, $SE = 0.05$, $p = 0.80$ and $b = -0.08$, $SE = 0.04$, $p = 0.06$ when career support was +1 and −1 SD around the mean), we further probed at what level of career support job autonomy would have a significant effect on job crafting change. The results indicated that, when career support was −1.2 SD below the mean, the association between job autonomy and job crafting change became significantly negative: $b = -0.11$, $SE = 0.06$, $p = 0.049$. Thus, when respondents received little career support from family and friends, their job autonomy likely led them to withdraw from job crafting efforts over time.

Discussion

Although how job crafting relates to major work outcomes has received numerous empirical investigations (Rudolph *et al.*, 2017), the extant literature has yet to examine within-person change of job crafting over time. We draw from the self-regulation perspective to understand individuals' lived-through experience of job crafting. Unlike daily studies that investigate the dynamic relationship between job crafting and other factors (e.g. Bakker *et al.*, 2020; Bakker and Oerlemans, 2019; Demerouti *et al.*, 2015b; Petrou *et al.*, 2012), our longitudinal approach focused on within-person changes in job crafting over time. Surveying college faculty over a semester, we found that college professors and instructors showed, on average, a decreasing trend of job crafting during a four-month period. Although the iterative process of job crafting maintenance may take on different forms, in the present context of college faculty's job, the decreasing trend likely stemmed from the increase in their work demands throughout a semester. From a theoretical perspective, job crafting maintenance over time is distinct from the typical between-person conceptualization. Our study revealed interesting dynamics of job crafting that would be otherwise masked in a cross-sectional design. Ignoring changes over time may result in erroneous estimates between job crafting and other constructs. For example, if employees maintain job crafting at different rates, the effect size of association between job crafting and other constructs would depend on the time when measurement takes place.

Our findings offer unique insight into the effect of autonomy on job crafting. Contrary to the hypothesized positive effect, we found that autonomy did not predict job crafting maintenance. In fact, when career support from family and friends was low, employees with higher autonomy at work appeared to have abandoned job crafting. This finding serves an interesting contrast to the established positive association between autonomy and job

crafting *levels* (Rudolph *et al.*, 2017), which received similar support in the present study in that the correlation between job autonomy and job crafting at each time point was significantly positive (rs = 0.32, 0.21, and 0.31) [2]. The discrepant effect of job autonomy on job crafting level versus change underscores the importance of examining job crafting maintenance – without a longitudinal study, the role of job autonomy would have been somewhat obscured. Our study suggests that job autonomy may sometimes serve as a double-edged sword: Against the backdrop of increasing work demands, individuals with limited career support might see high autonomy as a license to focus on their immediate work tasks rather than opportunities to sustain job crafting. In other words, when dealing with competing goals (see DeShon *et al.*, 2004), individuals without the career support from family and friends would prioritize more immediate goals and options (Stiglbauer and Kovacs, 2018) at the expense of sustained job crafting and possible long-term career gains. In contrast, when career support from family and friends was high, employees tended to be better maintain their job crafting over time regardless of the degree of autonomy at work. This interesting finding points to the need to understand how the self-regulation in job crafting unfolds over time. Future studies should include competing goals and behaviors (Lord *et al.*, 2010) to illuminate the intraindividual processes of job crafting maintenance. Our finding also highlights the importance of career support from non-work domains. Individuals who proactively make changes to their jobs may have limited energy and time to maintain crafting effort due to goal conflicts in resource allocation (Lord *et al.*, 2010). Not only is career support an important social resource (Hobfoll, 1989) that contributes to initial job crafting, our study suggests that career support from family and friends can help direct employees' self-regulatory behaviors toward long-term career outcomes.

Practical implications

Job crafting can serve as a low-cost approach for organizations to develop human resources. Instead of training and job redesign, organizations can encourage employees to craft their jobs to best meet their individual needs. Our findings suggest that managers may benefit from recognizing the changing nature of job crafting. Given the challenge in maintaining job crafting over time, managers may provide timely assistance and support for employees to better regulate their crafting efforts. Our study also echoed earlier work by Berg *et al.* (2010) which suggests that simply rendering a great deal of autonomy at work may not promote job crafting. Organizations can increase access to various career-related supports from across life domains. For example, establishing channels for employees to seek and receive career support from non-work domains can prove rewarding. Organizations can also offer mentoring programs to help employees receive career-related feedback and guidance.

Limitations and future research

We recognize the limitations of the present investigation due to its unique setting, including the work context of college professors and instructors, the cycle of a semester, and the Chinese cultural context. First, college faculty generally enjoy high job autonomy that may not be readily available to many workers, and the cognitive demands they face stand in sharp contrast to physical demands (McGonagle *et al.*, 2015). Second, it is unclear whether the present pattern of job crafting maintenance may generalize to other job contexts without a clear demarcation of work cycles, and future studies are needed to examine job crafting changes over longer work cycles (e.g. accountants working in a fiscal year). Third, we assumed the role of job demands in college faculty's cyclical job characteristics in shaping the change pattern of job crafting without modeling it in the analysis. Future research should explicitly test this assumption by modeling job demands together with changes in job crafting. It is even possible that job demands may exert differential influence over time on

different dimensions of job crafting (*cf*. Petrou *et al.*, 2012). Finally, given Chinese cultural emphasis on in-group collectivism (House *et al.*, 2004), it is possible that career support from family and friends plays a stronger role while autonomy exerts weaker influence, compared to other individualistic cultures.

Our study also points to prospective research directions. First, the finding that the initial level and change of job crafting were two distinct phenomena raises new questions about the long-term effect of sustained job crafting. It is possible that job crafting maintenance in a demanding work environment represents effortful and persistent pursuit of one's career goals. Consequently, individuals exhibiting higher levels of job crafting maintenance are likely in a better position to achieve desirable career outcomes in the long run. Future research should investigate how job crafting maintenance over a longer period of time uniquely relates to career outcomes, above and beyond one's transient level of job crafting. Second, the conceptualization of job crafting maintenance opens avenues for future research to investigate the dynamics of self-regulation of job crafting effort. According to Bandura's (1991) social cognitive theory, successful crafting experiences can elevate self-efficacy, leading to higher crafting goals and continuous crafting. In contrast, Carver and Scheier's (1998) control theory of self-regulation suggests that job crafters who have successfully made changes to their jobs would assume jobs done, withhold effort in crafting, and reallocate effort to alternative work tasks. Future research can investigate how job crafting maintenance would extend in the long run under the influence of alternative work goals. Third, recent theoretical advances of job crafting applied the approach and avoidance motivation framework (see Bruning and Campion, 2018; Zhang and Parker, 2019) and the regulatory focus perspective (see Bindl *et al.*, 2019; Lichtenthaler and Fischbach, 2019) to integrate and expand the conceptualization of job crafting. Researchers can focus on unique forms of crafting strategies and examine how different strategies are adopted and revised over time. Fourth, future research can identify individual differences as antecedents to effortful regulation of job crafting. One might suspect job crafting maintenance to stem in part from trait conscientiousness, which may promote persistent attempts at job crafting despite at work (Huang *et al.*, 2014). This would be consistent with the positive association between conscientiousness and job crafting at the between-person level (Rudolph *et al.*, 2017). However, we submit a more nuanced look at individual difference, as global trait levels may be too coarse to reflect individuals' varied behaviors across situations. It is likely that task-contingent conscientiousness – an individual's tendency to elevate state conscientiousness at the time of heightened task demand (Minbashian *et al.*, 2010) – can better predict job crafting maintenance, as it captures individuals' dynamic responses to changing task demands (Huang and Bramble, 2016).

Conclusion

Wrzesniewski and Dutton (2001) commented, "Future research would benefit from a more nuanced and processual account of how job crafting is initiated; how it is sustained and transformed in the work process; and how it resembles (or not) learning, improvising, and creative processes over time" (p. 196). Our study adds to the emerging research that addresses this call by investigating within-person job crafting change and examining how additional resource from non-work domain facilitates job crafting maintenance. Our study lays the foundation for future research to further explicate the dynamic nature of job crafting.

Notes

1. Exploring the change pattern of the three dimensions of job crafting revealed similar declining trends over time.

2. The effect of job autonomy on the initial status of job crafting was significant without control variables.

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Corresponding author
Baoguo Xie can be contacted at: xiebaoguo@foxmail.com

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