

**Predicting Job Crafting from the Socially Embedded Perspective: The Interactive Effect
of Job Autonomy, Social Skill, and Employee Status**

Tomoki Sekiguchi

Kyoto University

Jie Li

Shanghai University

Masaki Hosomi

Kagawa University

Sekiguchi, T., Li, J., & Hosomi, M. (2017). Predicting job crafting from the socially
embedded perspective: The interactive effect of job autonomy, social skill, and
employee status. *Journal of Applied Behavioral Science*. doi:
10.1177/0021886317727459.

Corresponding Author: Jie Li, School of Management, Shanghai University, 99 Shangda Road,
Shanghai 200444, China. Email: mgmtli@i.shu.edu.cn

Predicting Job Crafting from the Socially Embedded Perspective: The Interactive Effect of
Job Autonomy, Social Skill, and Employee Status

Abstract

Job crafting represents the bottom-up process of change employees make in their work boundaries and plays an important role in the management of organizational change. Following the socially embedded perspective, we examine the roles of job autonomy, social skill, and employee status in predicting job crafting. Study 1 with a sample of 509 part-time employees found that job autonomy and social skill not only directly but also interactively influenced job crafting. Study 2 with a sample of 564 full-time employees further revealed that job autonomy had a stronger impact on job crafting when employee status was high, but for those with a high level of social skill, job autonomy influenced job crafting regardless of the level of employee status. Our results suggest that managers and change agents can promote job crafting for organizational change by enhancing employees' ability to interact with others effectively, along with the increase of job autonomy.

Keywords: job crafting; job autonomy; social skill; employee status

Predicting Job Crafting from the Socially Embedded Perspective: The Interactive Effect of Job Autonomy, Social Skill, and Employee Status

In recent decades, the role that employees play in initiating change as a bottom-up process has gained increasing attention (Ghitulescu, 2013; Giebels, de Reuver, Rispens, & Ufkes, 2016). Specifically, researchers on job design and socialization have noted that employees may redesign or modify their jobs on their own initiative with or without the involvement of management (Black & Ashford, 1995; Kulik, Oldham, & Hackman, 1987; Nicholson, 1984; Wrzesniewski & Dutton, 2001). In line with this view, Wrzesniewski and Dutton (2001) first coined the term “job crafting” to illustrate the proactive, bottom-up way in which employees shape, mold, or redefine their jobs. Job crafting is defined as the “physical and cognitive changes individuals make in the task or relational boundaries of their work” (Wrzesniewski & Dutton, 2001, p. 179) and consists of the three forms: changing the task boundaries of the job (e.g., the number, scope, or types of job tasks performed at work), changing the relational boundaries of the job (e.g., the quality and/or amount of interaction with others at work), and changing the cognitive task boundaries of the job (e.g., the meaning and significance of the job).

Job crafting is a common and widespread phenomenon across occupations, such as childcare educators, special education teachers, salespersons, nurse midwives, manufacturing employees, and political advocacy employees (Berg, Grant, & Johnson, 2010a; Berg, Wrzesniewski, & Dutton, 2010b; Caza, 2007; Ghitulescu, 2007; Leana, Appelbaum, & Shevchuk, 2009; Lyons, 2008). It is suggested that job crafting will result in positive employee outcomes such as resilience, positive experiences, internal motivation, job satisfaction, job performance, job effectiveness, creativity, work engagement, organizational commitment, well-being, and employability (Bakker, Tims, & Derks, 2012; Ghitulescu, 2007; Leana et al., 2009; Lu, Wang, Lu, Du, & Bakker, 2014; McClelland, Leach, Clegg, &

McGowan, 2014; Tims, Bakker, & Derks, 2012, 2013, 2015; Tims, Bakker, Derks, & van Rhenen, 2013). It is also suggested that employees who craft their jobs can deal more effectively with the organizational change process (Petrou, Demerouti, & Schaufeli, 2016).

As described in the next section, job crafting plays an important role in the management of organizational change. Therefore, the purpose of the present research is to investigate what factors promote employee job crafting and what mechanisms are involved in the process, paying particular attention to the socially embedded perspective that emphasizes that jobs, roles, and tasks are embedded in a social structure in the workplace (Berg et al., 2010b; Grant, 2007; Grant & Parker, 2009). Specifically, we theorize the roles of job autonomy, social skill, and employee status as factors that influence employee job crafting, and test our hypotheses with a large sample of approximately 1,100 part-time and full-time employees working in a variety of industries, occupations, organizations, and jobs in Japan. By doing so, our research contributes to the theory and practice of job crafting, demonstrating that along with job autonomy, the ability to interact with others or influence others is a critical factor in promoting employee job crafting in the workplace where jobs, roles, and tasks are socially embedded.

The Role of Job Crafting in Organizational Change

Job crafting plays a critical role in the management of organizational change for several reasons. First, job crafting is related to a micro-level and bottom-up process of organizational change. Employees are not just passive recipients of organizational change initiated by top management and middle managers but also proactive facilitators of organizational change (Frohman, 1997; Ghitulescu, 2013). From this view, employees can initiate organizational change by crafting their jobs to adapt to the changing environment (Cameron & McNaughtan, 2014). For example, if each employee engages in job crafting to adjust to the changing environment he or she is facing in daily work, the accumulation and

aggregation of such small changes would eventually result in a large-scale organization-level change, which enables the organization to adapt to the new environment. Therefore, managers could expect their employees not only to adapt to the implemented changes but also proactively introduce changes (Grant & Parker, 2009).

Second, job crafting can also be considered as an adaptive behavior to the top-down process of organizational change. That is, employees can effectively respond to the organizational change effort initiated by managers and change agents through job crafting (Petrou, Demerouti, & Schaufeli, 2015; Petrou et al., 2016). The top-down process of organizational change may be followed by the fine-tuning process and the adaptation process that occur at the employee level. The fine-tuning process includes modifications to the jobs and operations to align with the new organizational strategy and structure (e.g., Rafferty & Simons, 2006). Job crafting enables the fine-tuning process through changing the task and relational boundaries of the jobs. The adaptation process includes the employees' coping with anxieties and uncertainties caused by the organizational change effort (Armenakis & Bedeian, 1999). Job crafting promotes the adaptation process because it enables the employees to cope with the uncertainty that emerges (Petrou et al., 2015, 2016).

Third, encouraging and promoting job crafting will decrease employees' resistance to organizational change and increase readiness for and openness to organizational change (Holt, Armenakis, Feild, & Harris, 2007; Van Dam, Oreg, & Schyns, 2008; Wanberg & Banace, 2000). For example, job crafting may increase employees' readiness for and openness to change through promoting their change-related self-efficacy (i.e., perceived abilities to handle change in a given situation) and role-breadth self-efficacy (i.e., perceived abilities to carry out a broad and proactive set of work tasks) (Cunningham et al., 2002; Van Dam et al., 2008; Wanberg & Banace, 2000). The readiness for and openness to organizational change among employees enhanced by job crafting will eventually result in a

high level of commitment to change when organizational change takes place (Oreg, 2003; Shin, Seo, Shapiro, & Taylor, 2015) and enables the organization to institutionalize change (Armenakis & Bedeian, 1999).

For the above reasons, understanding the predictors of employee job crafting enables managers and change agents to promote employees to actively participate in the change process and engage in job crafting behavior that supports organizational change.

Socially Embedded Perspective of Job Crafting

In contrast to the traditional job design literature, which defines a job as a collection of tasks designed to be performed by an employee, the socially embedded perspective emphasizes that jobs, roles, and tasks are embedded in an interpersonal structure (Berg et al., 2010b; Grant, 2007; Grant & Parker, 2009). The socially embedded perspective suggests that interpersonal relationship in the workplace is critical for job crafting at the individual level and organizational change at the aggregate level. Based on this perspective, Berg and colleagues (2010b) conducted a qualitative study with 33 employees and found that employees in both low and high ranks engaged in job crafting, but the challenges they faced in crafting their jobs and their adaptive moves to overcome the challenges differed by rank because the nature of their relationship with others in the workplace was different according to employee rank. Specifically, their findings suggest that lower-rank employees are more likely to face challenges to manage expectations of their supervisors, colleagues, and/or customers in crafting their jobs. Because Berg et al.'s (2010b) study was based on the qualitative and inductive approach, a quantitative, theory-testing approach with large samples is necessary to advance this perspective (e.g., Lee, Mitchell, & Sablinski, 1999). In this sense, the current investigation uses job autonomy, social skill, and employee status as measurable constructs and focuses on the interrelationship between these constructs in predicting employee job crafting.

Under the socially embedded perspective of job crafting, we examine the roles of job autonomy, social skill, and employee status for the following reasons. First, researchers have repeatedly contended that perceived opportunities to job craft are necessary conditions to facilitate job crafting (e.g., Leana et al., 2009; Tims & Bakker, 2010; Wrzesniewski, Berg, & Dutton, 2010; Wrzesniewski & Dutton, 2001). One major factor that contributes to the perceived opportunity to job craft is job autonomy, defined as the extent to which the job provides substantial freedom, independence, and discretion to employees in carrying out their work (Hackman & Oldham, 1976). Next, given the socially embedded perspective, the ability to effectively interact with others and the power to influence others in the workplace are considered critical in facilitating job crafting. The former is related to social skill, defined as the ability to effectively read, understand, and control social interactions (Ferris, Witt, & Hochwarter, 2001; Norton & Hope, 2001; Witt & Ferris, 2003). The latter is related to employee status, or the employees' structural locations, prestige, and power to influence others in their jobs (Anderson, John, Keltner, & Kring, 2001).

Hypothesis Development

The Role of Job Autonomy

The theory of job crafting states that employees have three basic needs that motivate them to craft their jobs: (a) control over job and work meaning, (b) positive self-image, and (c) human connection with others (Berg, Dutton, & Wrzesniewski, 2008, 2013; Wrzesniewski & Dutton, 2001). As a result of these three basic needs, employees assess the opportunity to job craft. Perceived opportunity to craft a job refers to "the sense of freedom or discretion employees have in what they do in their job and how they do it" (Wrzesniewski & Dutton, 2001, p. 183). It helps to actualize three basic needs that employees have through job crafting. As stated earlier, one major factor that contributes to the perceived opportunity to job craft is job autonomy. A high degree of job autonomy would stimulate job crafting by

signaling to employees that they have the freedom and opportunity to take initiative changes (Bindl & Parker, 2011; Grant & Ashford, 2008; Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012). In addition, research shows that a higher level of autonomy is positively related to a higher level of role-breadth self-efficacy, which encourages employees to carry out a wider range of tasks and redefine their roles and job boundaries to include broader responsibilities and impacts (Horning & Rousseau, 2007; Morgeson, Delaney-Klinger, & Hemingway, 2005; Parker, 1998; Wrzesniewski & Dutton, 2001; see also Ashforth & Kreiner, 1999).

Although the argument that job autonomy influences job crafting, as discussed above, has been theoretically developed (e.g., Bakker, 2010; Wrzesniewski & Dutton, 2001) and empirically tested (Leana et al., 2009), we formally state this prediction as a baseline hypothesis for the following theoretical development (Andersson, Cuervo-Cazurra, & Nielsen, 2014).

Hypothesis 1. Job autonomy will be positively related to job crafting.

The Role of Social Skill

Social skill represents the ability to adjust one's behavior to different and changing situational demands and to effectively influence and control others' responses. It reflects interpersonal perceptiveness and behavioral flexibility (Ferris et al., 2001; Witt & Ferris, 2003). Social perceptiveness refers to accurately interpreting interpersonal dynamics (e.g., perceive and accurately interpret subtle social cues and read between the lines), and behavioral flexibility refers to effectively using those social perceptions "to determine the appropriate timing for an influence attempt, improvise when they perceive that their planned self-presentation strategy is unlikely to work, and know when to speak up or remain silent" (Ferris et al., 2001, p. 1076). Therefore, social skill is different from but related to emotional intelligence that contains the ability to identify others' emotions (Brackett, Rivers, Shiffman,

Lerner, & Salovey, 2006), and includes narrower skills such as persuasion skills. Social skill is also different from personality such that social skill can be learned and trainable (Ferris et al., 2001).

In work settings, social skill has been found to predict job performance; promotions and salaries; success in many different occupations, such as medicine, law, and sales; entrepreneurs' financial success; and measures of new venture performance (Baron & Markman, 2003; Baron & Tang, 2009; Belliveau, O'Reilly, & Wade, 1995; Hochwarter, Witt, Treadway, & Ferris, 2006; Robbins & DeNisi, 1994; Seibert, Kraimer, & Liden, 2001; Wayne, Liden, Graf, & Ferris, 1997). In essence, good social skill enables employees to interact with others and negotiate effectively and to obtain valuable feedback about the meaning of their jobs; thus, they obtain more resources than employees with poor social skill (Ferris et al., 2001; Riggio & Zimmerman, 1991; Witt & Ferris, 2003). In addition, socially skilled employees are more apt to demonstrate patience during social interactions, gather information and other resources, and take initiative to expand their roles (Hochwarter et al., 2006).

We argue that social skill plays an important role in facilitating employee job crafting in the workplace where jobs, roles, and tasks are socially embedded. Employees with a high level of social skill will be more likely than those with a low level of social skill to anticipate that engaging job crafting makes the most of their social skill, and successful implementation of job crafting fulfills their basic needs such as human connection with others, control over job and work meaning, and positive self-image. For example, changing the boundaries of tasks or interpersonal relations is accompanied by discussions or negotiations with others, such as supervisors, coworkers, and customers (e.g., Fried, Hollenbeck, Slowik, Tiegs, & Ben-David, 1999; Wrzesniewski & Dutton, 2001; Wrzesniewski, Dutton, & Debebe, 2003), which will satisfy the basic needs. Thus, we predict the following direct influence of social

skill on employee job crafting.

Hypothesis 2. An employee's social skill will be positively related to job crafting.

We also argue that the levels of employees' social skill will change the relationship between job autonomy and employee job crafting. As discussed earlier, a high level of job autonomy increases an employee's perceived opportunity to job craft, which promotes the motivation for job crafting. However, according to the socially embedded perspective, employees have to overcome many challenges stemming from the social relationship in the workplace when crafting their jobs (Berg et al., 2010b; Crant, 2000; Griffin, Neal, & Parker, 2007). A high level of social skill will enable the employees to interact with supervisors, coworkers, or customers effectively, which helps the employees to overcome the interpersonal challenges and promotes their job crafting behaviors. On the other hand, employees with a low level of social skill are less likely to engage in job crafting even though job autonomy is high because they do not think they can overcome the obstacles stemming from the interpersonal relationships. In short, a high level of social skill amplifies and a low level of social skill reduces the effect of job autonomy on employee job crafting. Thus, we predict the following:

Hypothesis 3. An employee's social skill will moderate the relationship between job autonomy and job crafting such that the relationship is stronger when the employee's social skill is high rather than low.

Moderating Influence of Employee Status

This paper defines employee status relatively broadly as employees' structural locations, prestige, and power to influence others in their jobs. By this definition, a high level of employee status assumes having the power stemming from structural locations (e.g., formal or legitimate and reward power) and/or prestige (e.g., expert and referent power) (e.g.,

French & Raven, 1959).

We predict that employee status influences the degree to which employees can actually engage in job crafting given the same level of job autonomy. High-status employees have more power than low-status employees to influence other people in the workplace, such as colleagues and subordinates (Keltner, Gruenfeld, & Anderson, 2003; Magee & Galinsky, 2008). In addition, because high-status employees are generally admired by others (Magee & Galinsky, 2008), their bosses, coworkers, and customers are more likely to develop positive expectations about the outcomes of their job crafting (e.g., it will be successful). Therefore, high-status employees can overcome challenges involving relational constraints (e.g., needs to persuade or convince others in the workplace to craft the job) more easily than low-status employees, and their perceived opportunities to job craft will be greater, especially when job autonomy is high.

On the other hand, for low-status employees, job autonomy itself may not be sufficient to promote job crafting. Low-status employees may anticipate that their job crafting efforts are less likely to be successful even with a high level of job autonomy, because these employees generally lack the power to alter the boundaries of tasks and interpersonal relations. For example, low-status employees' supervisors, coworkers, or customers may not welcome their job crafting because it may cause inefficiency or "rock the boat" (negative expectation) (e.g., Berg et al., 2013; Grant, Parker, & Collins, 2009). The above argument is consistent with that of Berg et al. (2010b), which suggests that perceived challenges stemming from the interpersonal relationship are stronger for low-status employees. In summary, a high level of employee status strengthens and a low level of employee status weakens the effect of job autonomy on employee job crafting. Thus, we predict the following:

Hypothesis 4. Employee status will moderate the relationship between job autonomy

and job crafting such that the relationship is stronger when employee status is high rather than low.

Influence of Social Skill on the Effect of Employee Status

We argue that the employee's level of social skill influences the moderating effect of employee status between job autonomy and job crafting as predicted in Hypothesis 4. Specifically, we predict that the moderating effect of employee status will be weaker when an employee's social skill is high rather than low. Because social skill represents the ability to interact with others effectively, it helps the employees to overcome the interpersonal barriers in job crafting stemming from the lack of power due to the low employee status. That is, even those low-status employees can utilize social skill to convince others to craft the job if they have discretion to do so. Therefore, when an employee's social skill is high, job autonomy will promote job crafting regardless of the level of employee status.

On the other hand, when an employee's social skill is low, the effect of employee status on the relationship between job autonomy and job crafting is stronger because, as theorized in Hypothesis 4, low-status employees will face greater interpersonal challenges to craft their jobs because of the lack of power. Moreover, they could not persuade other people that their job crafting is effective. Only those high-status employees can overcome the interpersonal barriers to craft their jobs because they have the power to influence others. Thus, we predict the following three-way interaction between job autonomy, social skill, and employee status.

Hypothesis 5. There will be a three-way interaction between job autonomy, social skill, and employee status such that when social skill is high rather than low, the moderating effect of employee status on the relationship between job autonomy and job crafting will be weaker.

Figure 1 displays the theoretical framework of this research. We conducted two empirical studies to test our hypotheses. Study 1 used a sample of student part-time workers in Japan, representing low-status employees, and tested Hypotheses 1 to 3. Study 2 then used a sample of full-time employees in Japan with various employee statuses, replicating Hypotheses 1 to 3 and further testing Hypotheses 4 and 5.

Insert Figure 1 about here

Study 1

Sample and Procedures

The data used for this study were collected as part of a large survey of part-time work; the participants consisted of students with part-time employment who were taking undergraduate management courses at a national university in Japan. Part-time work by students is common in Japan such that over 90% of the university students engage in part-time work (Intelligence, 2006). In addition, some industries such as restaurants and retail heavily rely on student part-time workers to maintain their businesses and entrust them with work that is almost equivalent to that of regular employees (Takeishi, 2002). Thus, student part-time workers are considered to have representative characteristics of low-status employees in Japan. The survey packets were distributed during course hours. A cover letter attached with the questionnaire assured the participants that their participation was voluntary and that their responses would be used only for research purposes. The data were collected in two different time periods to alleviate the potential for common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In the first survey, the participants responded to items measuring social skill as well as demographic information. After two weeks, a second survey was administered in which job autonomy and job crafting behaviors in their part-time work were measured. Because the questionnaires were anonymous, participants were asked to

generate unique identifiers (Fedor, Davis, Maslyn, & Mathieson, 2001). We used these identifiers to match data in the first and second survey. Over 90% of the students who took the management courses agreed to participate in this study and completed the surveys (i.e., about 90 % response rate). Because of the nature of this study, 33 students without part-time work experience were excluded from the sample, resulting in a total sample size of 509.

Seventy-two percent of the respondents were male, and the majority of participants were college juniors (58.8%), with an average age of 21.2 years ($SD = 2.1$). On average, they had worked for 23.3 months ($SD = 12.8$) and worked 11.6 hours ($SD = 8.7$) per week. Participants were employed in a variety of workplaces, including teaching (34.1%), restaurants (28.0%), retail (18.1%), services (7.8%), administrative assistance (5.9%), physical labor (2.4%), and other workplaces (3.7%). Teaching jobs include the instructor positions in cram schools and prep schools that use many student part-time employees. Other industries such as restaurants, retail, and services represent the industries that utilize a large number of student part-time employees in Japan.

Measures

The items of job autonomy and social skill, originally developed and validated in English, were translated into Japanese and then back-translated to ensure that the meaning had been retained (Brislin, Lonner, & Thorndike, 1973). Some wording was adjusted to fit the research context. The scale for job crafting was developed by the authors in Japanese for this study. All items were answered using a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

Job autonomy. Job autonomy was measured using the three-item scale developed by Hackman and Oldham (1980) and modified by Idaszak and Drasgow (1987). It assesses the degree of discretion employees have over important decisions in their work, such as the timing of tasks and work methods. A sample item was “I have significant autonomy in

determining how I do my job.” The Cronbach’s alpha for this scale was .85.

Social skill. We assessed participants’ social skill using the seven-item measure adapted from Ferris et al. (2001). A sample item was “In social situations, it is always clear to me exactly what to say and do.” The Cronbach’s alpha was .80.

Job crafting. We developed the job crafting scale for this study based on the original conceptualizations by Wrzesniewski and Dutton (2001). Although some researchers have developed their job crafting scales, these scales do not fully capture the original conceptualizations of job crafting. For example, Leana et al. (2009) developed the individual job crafting scale, but their scale measures task crafting only. Tims et al. (2012) also developed their job crafting scale, but they changed the definition of job crafting using the job demands–resources (JD–R) model, which is often used in such topics as job stress and employee well-being (e.g., Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Therefore, their job crafting scale consists of four dimensions related to job demands and resources rather than the original three dimensions (i.e., task, relational, and cognitive crafting).

As a first step of the scale development, we discussed with eight graduate students who majored in business administration and generated a list of items for each dimension of job crafting (about 10 items each) (Hinkin, 1998). Based on the discussions with these graduate students, and considering Wrzesniewski and Dutton’s (2001) original conceptualizations, we eliminated items that were overlapping in meaning and narrowed them down to twelve items, with four items for each dimension. To examine the content validity, we invited a panel of judges to sort these twelve items in terms of which dimension they thought it fits with (Hinkin, 1998). This panel consisted of 10 graduate students with part-time work experience. We asked them to indicate whether each item fits best with task crafting, relational crafting, cognitive crafting, or none of the above. We retained 10 items for which most judges reached agreement (i.e., at least eight students categorized the item on the

intended dimension). Next, we conducted a pilot study in a management class where 32 graduate students with part-time work experience were asked to rate these statements on a 7-point scale (1 = strongly disagree, 7 = strongly agree). After exploratory factor analysis (EFA) and an examination of factor loadings, we eliminated one item that did not load on the intended dimension, thus creating a nine-item scale to measure part-time workers' job crafting. Each dimension was measured using three items. This three-factor solution explained 72.71% of the underlying item variance and no cross construct loadings emerged. The job crafting items are listed in the Appendix. The results of confirmatory factor analysis (CFA) with the data of 509 participants in this study supported the three-dimensional structure of this scale ($\chi^2[24] = 117.74$; CFI = .91; IFI = .91; SRMR = .06). The average variance extracted (AVE) scores of three dimensions ranged from .73 to .90, showing that the scale possesses good convergent validity. Because the three dimensions address the same overall construct, we averaged all three dimensions to form a single-scale score of job crafting (e.g., Reiche, Cardona, Lee, Canela, Akinnukawe, Briscoe, ... & Grenness, 2014). The Cronbach's alpha of this full scale was .80.

Control variables. We introduced several control variables into our analyses to minimize the effects of other exogenous variables. These control variables mainly concern participants' demographics, including gender, age, part-time work experience (number of months), and work hours per week. To control for the effect of industries, we created eight dummy variables that represent different types of part-time work in the sample.

Results

As a preliminary analysis, Harman's single-factor test was run to ensure that our findings were not attributed to common method variance (Podsakoff et al., 2003). Five factors with eigenvalues greater than 1 emerged, and the first factor accounted for 25.84% of the variance. The result revealed no evidence of this concern. To examine the discriminant

validity of job autonomy, social skill, and job crafting, we performed CFA using the package “lavaan” in R (Rosseel, 2012). As the original measures consisted of many indicators, we reduced the number of indicators for each latent variable. First, we parceled items under each dimension of job crafting to form three indicators for it. Next, following Mathieu and Farr (1991), we simplified the indicators for social skill to yield three aggregated indicators. Because job autonomy was measured by only three items, we did not reduce the number of indicators for this variable. The proposed three-factor baseline model provided best fit among other alternative models ($\chi^2[24] = 63.23, p < .001$; CFI = .97; IFI = .97; SRMR = .05) (Browne & Cudeck, 1993), and all the indicators loaded on their intended latent variables significantly at $p < .01$ level.

Table 1 presents the means, standard deviations, and correlations among the variables used in this study. Job autonomy and social skill are positively correlated with job crafting ($r = .39, p < .01$ and $r = .30, p < .01$, respectively), lending initial support for Hypotheses 1 and 2.

Insert Table 1 about here

To further test our hypotheses, we conducted hierarchical regression analyses. We centered the predictors to reduce multicollinearity when examining the interactive effects (Aiken & West, 1991; Cohen, 1978). Table 2 presents the regression results. Variance inflation factor (VIF) scores for each variable reveal no serious problem with multicollinearity. In Model 1, we included the control variables and independent variables (job autonomy and social skill) in the regression. In Model 2, we entered the two-way interaction term between job autonomy and social skill into the regression.

Insert Table 2 about here

The results of Model 1 show that, even after control variables are accounted for, job autonomy and social skill are significantly related to job crafting ($t = 7.46, p < .01$ and $t = 5.38, p < .01$, respectively). Thus, Hypotheses 1 and 2 were supported. Hypothesis 3 predicted that social skill would moderate the relationship between job autonomy and job crafting. The results of Model 2 indicate the existence of a moderation effect ($\Delta R^2 = .01, \Delta F = 3.89, p < .05$). Figure 2 depicts the significant interaction plotted using the approach outlined in Aiken and West (1991) and suggests that the moderating effect of social skill on job crafting is in the predicted direction. We also computed the simple slopes of job crafting onto job autonomy (Aiken & West, 1991). The slopes at both high and low levels of social skill are significant ($b = .30, t = 7.22, p < .01$ and $b = .21, t = 4.85, p < .01$, respectively) but the slope for high social skill is steeper than that for low social skill. In keeping with Hypothesis 3, the relationship between job autonomy and job crafting is stronger when social skill is high rather than low. Thus, Hypothesis 3 was supported.

Insert Figure 2 about here

Although Hypotheses 1 to 3 were supported in Study 1, the sample included only low-status, part-time employees. To ensure that the observed relationships are robust to support these hypotheses, it is necessary to conduct a constructive replication in high-status employees. It is also necessary to conduct a replication using full-time employees, who are more representative of the regular workforce.

Study 2

Sample and Procedures

In this study, we seek to address the above concerns and test all of our hypotheses,

including the effect of employee status. We hired an online survey company to collect data as part of a large survey. This company has hundreds of thousands of registered individuals in Japan who agree to answer surveys, particularly for large-scale online surveys. Following the random sampling procedure, the company distributed our questionnaire to participants who were employed full-time at the time of the survey. Participation was voluntary, and potential participants were promised small monetary incentives by the online survey company. The online survey company collected the respondents' demographic information before the survey. The data were collected in two different time periods. In the first survey, we collected data on job characteristics and social skill. After two months, we collected data on job crafting.

Sixty-four percent of the individuals who received the questionnaire invitation answered the first survey, and 71% of those who answered the first survey also answered the second survey. We received 594 usable surveys back, with an overall response rate of 46%. Finally, we excluded those who changed jobs or moved within organizations, resulting in a sample size of 564. Well over half (70.0%) of the respondents were male, and the average age was 40.84 years ($SD = 9.89$). Participants were employed in a variety of workplaces, including manufacturing (39.9%), information communication (13.3%), finance (10.9%), services (10.7%), retail (9.2%), construction (3.9%), transportation (3.0%), education (1.8%), real estate (1.8%), public services (1.3%), healthcare (1.1%), and other workplaces (3.1%).

Measures

Job autonomy. As in Study 1, participants rated the level of job autonomy using the three-item scale developed by Hackman and Oldham (1980) and modified by Idaszak and Drasgow (1987). The Cronbach's alpha for this scale was .82.

Social skill. As in Study 1, we assessed participants' social skill using the seven-item measure adapted from Ferris and colleagues (2001). The Cronbach's alpha of this scale

was .83.

Employee status. Because the participants were employees at various companies across the nation, it is difficult to compare their employee status across the sample. Thus, to capture the degree of employee status with an objective measure, we used annual household income from the participants' demographic information as a proxy, assuming that income is higher for high-status employees than low-status ones (e.g., Dahl, 1994; Leana & Meuris, 2015; Rosen & Jerdee, 1979). In fact, several statistics in Japan suggest that in general, the higher is an employee's status in terms of a job position or occupation, the higher is his/her income (JPC-SED, 2011; Ministry of Health, Labour and Welfare, 2014; National Personnel Authority, 2014). In addition, the results of one-way ANOVA indicate that the differences of the average income across industries are nonsignificant in our sample. We acknowledge that this proxy has limitations, such as the case of double income in married couples. Thus, we also analyzed the data with a subsample in which only employees who were single and did not live with their parents were included. For these participants, their annual household income was exactly their personal income and can be a more accurate proxy for employee status. We report the results using the subsample in the follow-up analysis.

Job crafting. Because we developed the job crafting scale in Study 1 based on the original construct proposed by Wrzesniewski and Dutton (2001), this scale was deemed appropriate for use for full-time employees as well. To ensure that our job crafting scale is applicable to the sample of full-time employees, we took the following steps. First, we compared our job crafting scale with Leana et al.'s one and confirmed that part of our job crafting scale, task crafting, is similar to Leana et al.'s first three items, except for some contextual wordings. Leana et al. (2009) reported that their scale was developed based partly on Wrzesniewski (2003). Because the sample of Leana et al.'s study included full-time employees, we inferred that our scale, at least the task crafting measure, was also applicable

to the sample of full-time employees. Second, to examine face and content validities of the scale, we asked six full-time employees independent of the researchers to assess our job crafting scale. They judged that the items of the scale represent the original conceptualizations of job crafting and are appropriate for full-time work. Third, as in Study 1, we invited a panel of 16 full-time employees to sort the nine items in terms of which dimension they thought it fits with. For all items, most judges reached agreement (i.e., at least 15 out of 16 full-time employees categorized the item on the intended dimension). Finally, we conducted a cross-validation study using a sample of 307 full-time employees working in China. We used the Chinese version of our job crafting scale as well as other scales to measure different variables. The results of CFA supported the three-dimensional structure of the scale as intended ($\chi^2[24] = 84.77$; CFI = .96; IFI = .96; SRMR = .05). The Cronbach's alpha of this full scale was .90. Further, the job crafting was correlated with job satisfaction (three-item scale; Hackman and Oldham 1980) ($r = .54, p < .01$) and psychological well-being (four-item scale; Brunetto, Farr-Wharton, & Shacklock, 2011) ($r = .59, p < .01$), which is consistent with the extant literature. These results lend some evidence of criterion-related validity. All in all, the above results suggest that our job crafting scale captures the generic components of the original job crafting construct by Wrzesniewski and Dutton (2001) and can be used for full-time employees.

As a result, employees' job crafting was measured by the nine-item job crafting scale. The results of CFA supported the three-dimensional structure of this scale ($\chi^2[24] = 125.56$; CFI = .96; IFI = .96; SRMR = .04). The Cronbach's alpha of this full scale was .90.

Control variables. As in Study 1, we controlled for participants' demographic variables, including gender, age, and education. Because married employees' annual household income may include their spouses' income, we included their marital status as a control variable. We did not control for industries in this study because they did not have

significant effect on job crafting in Study 1 and including these control variables may reduce the available degree of freedom and lower statistical power to detect a higher-order interaction effect (i.e., the three-way interaction) (Becker, 2005; Carlson & Wu, 2012).

Results

As a preliminary analysis, Harman's single-factor test was performed to ensure that our findings were not attributed to common method variance (Podsakoff et al., 2003). Four factors with eigenvalues greater than 1 emerged, and the first factor accounted for 31.21% of the variance. The result revealed no evidence of this concern. Next, we performed CFAs using the package "lavaan" (Rosseel, 2012). As in Study 1, we reduced the number of indicators for each latent variable. The proposed three-factor baseline model produced an excellent fit to the data ($\chi^2[24] = 58.39, p < .001$; CFI = .99; IFI = .99; SRMR = .03) (Browne & Cudeck, 1993), and all the indicators loaded on their intended latent variables (significantly at $p < .01$ level).

Table 3 presents the means, standard deviations, and correlations among the variables used in this study. Job autonomy and social skill correlate positively with job crafting ($r = .33, p < .01$ and $r = .28, p < .01$, respectively), lending initial support for Hypotheses 1 and 2.

Insert Table 3 about here

To further test our hypotheses, we conducted hierarchical regression analyses. We centered the predictors to reduce multicollinearity when examining the interactive effects (Aiken & West, 1991; Cohen, 1978). In Model 1, we included the control variables and independent variables (job autonomy, social skill, and employee status) into the regression. In Models 2 to 4, we entered the two-way interaction terms into the regression separately to avoid possible problems of high multicollinearity among interaction terms and weak

statistical power. Finally, in Model 5, we added the three-way interaction term into the regression after entering all the two-way interactions. VIF scores for each variable reveal no serious problem with multicollinearity.

Insert Table 4 about here

The results of Model 1 show that, even after the control variables are accounted for, job autonomy and social skill are significantly related to job crafting ($t = 6.88, p < .01$ and $t = 5.48, p < .01$, respectively). Thus, Hypotheses 1 and 2 were supported. Hypothesis 3 predicted that social skill would moderate the relationship between job autonomy and job crafting. The results of Model 2 do not indicate the existence of a moderation effect ($\Delta R^2 = .00, \Delta F = .00$, n.s.). Thus, Hypothesis 3 was not supported.

Hypothesis 4 predicted that employee status would moderate the relationship between job autonomy and job crafting. The results of Model 3 indicate a significant moderating effect of employee status for the relationship between job autonomy and job crafting ($\Delta R^2 = .02, \Delta F = 13.02, p < .01$). Further examination suggests that the relationship is stronger when social skill is high rather than low (Fig. 3). Simple slope analyses for this interaction reveal that both slopes are significant ($b = .33, t = 7.54, p < .01$ for high employee status; $b = .12, t = 2.68, p < .01$ for low employee status) while the slope for high employee status is steeper than that for low employee status. Thus, Hypothesis 4 was supported.

Insert Figure 3 about here

Hypothesis 5 predicted a three-way interaction between job autonomy, social skill, and employee status. Specifically, we predicted that the interactive effects of employee status and job autonomy on job crafting would differ depending upon the level of social skill. The results of Model 5 indicate the existence of a three-way interactive effect ($\Delta R^2 = .01, \Delta F =$

3.89, $p < .05$). A graphical illustration of the interaction is shown in Figure 4. A visual inspection of the graph suggests that, when social skill is low, job autonomy has the stronger impact on job crafting for high-status rather than low-status employees, suggesting the existence of the moderating effect of employee status. When social skill is high, on the other hand, this moderating effect appears weaker. These observations are consistent with our prediction. We further conducted a slope difference test (Dawson & Richter, 2006). The results reveal a significant difference in the slopes of high versus low employee status when social skill is low (slopes 2 and 4, $t = 3.27$, $p < .01$), but the slopes do not differ when social skill is high (slopes 1 and 3, $t = 1.30$, n.s.). Taken together, these results suggest that the moderating effect of employee status on the relationship between job autonomy and job crafting is observed only when social skill is low. Thus, Hypothesis 5 was supported.

 Insert Figure 4 about here

Follow-up analysis. To address the limitations of using annual household income to measure employee status, we also analyzed the data with a subsample comprised only of employees who were single and did not live with their parents. The size of the subsample was 172. Over half (50.6%) were male, and there were no significant differences in education and work hours per week between the full and subsamples. The participants in the full sample are older than those in the subsample (35.90 years old on average). We conducted the same analytical procedures on the subsample as on the full sample. The results show that job autonomy and social skill are significantly related to job crafting ($t = 2.55$, $p < .05$ and $t = 2.71$, $p < .01$, respectively), supporting Hypotheses 1 and 2. In addition, there is a significant moderating effect of employee status for the relationship between job autonomy and job crafting ($\Delta R^2 = .02$, $\Delta F = 4.32$, $p < .05$), and the three-way interactive effect is also significant ($\Delta R^2 = .03$, $\Delta F = 5.64$, $p < .05$). The patterns of interactions are consistent with our

hypotheses. Thus, Hypotheses 4 and 5 were supported, while Hypothesis 3 was not supported. In conclusion, the analyses of both the full and subsamples reveal similar results, indicating the robustness of the observed relationships.

Discussion

The role that employees play in the design of their own jobs is becoming increasingly important in the management of organizational change (Berg et al., 2013; Frese & Fay, 2001; Petrou et al., 2015, 2016; Tims et al., 2013; Wrzesniewski et al., 2010). In line with this view, the purpose of our research was to understand the role of job autonomy, social skill, and employee status that influence employee job crafting under the socially embedded perspective. Our findings demonstrated that the ability to interact effectively with other people is a critical factor in predicting employee job crafting in the workplace where jobs, roles, and tasks are embedded in a social and interpersonal structure. Specifically, the results of our two studies consistently showed that social skill as well as job autonomy had a direct relationship with job crafting, and Study 1 also found that the relationship between job autonomy and job crafting was stronger when social skill was high. These results support the idea that a high level of social skill motivates employees to craft their jobs to satisfy their basic needs for human connection with others, and enables employees to overcome many interpersonal challenges when they perceive the opportunity to job craft.

The two-way interaction between job autonomy and social skill was not detected in Study 2 with full-time employees, but including employee status in our analytical framework enabled us to identify the more complex relationship between job autonomy, social skill, and employee status. That is, our findings in Study 2 suggest that social skill still plays an important role in the effect of job autonomy on job crafting such that a high level of social skill as the ability to effectively interact with others diminishes the negative effect of low employee status in influencing job crafting. As a result, although job autonomy had a weaker

impact on job crafting when employee status and social skill were both low, job autonomy promoted job crafting regardless of the level of employee status when an employee's social skill was high. Another possible explanation of the nonsignificant two-way interaction between job autonomy and social skill in Study 2 is that this interaction would be especially evident when employee status is very low and interpersonal challenges are very high, which is the case of part-time employees. Both explanations are consistent with our basic argument that a high level of social skill helps employees to overcome the interpersonal challenges in job crafting due to low employee status. In short, both Study 1 and Study 2 demonstrated that the relationship between job autonomy and job crafting is stronger when employees have the ability to influence others in the workplace. Therefore, the findings of our studies contribute to the socially embedded perspective of job crafting and organizational change theory by theoretically and empirically demonstrating the importance of the ability to influence others as well as having autonomy in the process of job crafting as the bottom-up and employee-initiated change.

Implications for Practice

The findings of our studies have implications for the management of organizational change. As stated in the introduction section, employee job crafting plays a critical role in the micro-level and bottom-up process of organizational change, the adaptation to the top-down initiative of organizational change, and readiness for and openness to organizational change. To successfully manage the organizational change process, managers and change agents can encourage employee job crafting in addition to effectively communicating the necessity of the organizational change (e.g., Petrou et al., 2015, 2016). Specifically, our findings suggest that managers can promote employee job crafting by providing their employees with a high level of job autonomy and by increasing the levels of social skill, especially among low-status employees who generally lack the power to influence others in the workplace.

Job crafting by high-status employees might be more influential than job crafting by low-status employees as a bottom-up process of organizational change because of their relatively high importance of their jobs and roles in the organization. In addition, job crafting by high-status employees might be less compromised because of their power to influence others. Therefore, managers and change agents can encourage high-status employees to craft their jobs by providing them with a high level of autonomy to generate a stronger driving force for the organizational change initiative.

Job crafting by low-status employees might be less influential to organizational change but it could promote a bottom-up process of change by the accumulation and aggregation of such engagements. It could also increase the adaptation to, readiness for, and openness to organizational change among low-status employees. However, our findings show that merely providing them with a high level of job autonomy may not promote job crafting if their level of social skill is low. Therefore, the recruitment and selection of low-status employees could focus on finding job candidates who have a high level of social skill. Given that social skill is largely learned, unlike personality characteristics that are stable over time (Hochwarter et al., 2006; Hogan & Shelton, 1998; Witt & Ferris, 2003), organizations could also offer training to enhance existing low-status employees' social skill.

Limitations and Future Research

The results of our studies should be considered in terms of their limitations. First, most of our data are based on self-reported measures, except for employee status. As for job crafting, however, it is difficult for others, such as managers and supervisors, to observe employee job crafting (Wrzesniewski & Dutton, 2001). Job crafting requires cognitive deliberation to decide how task and relational boundaries should be altered, which is difficult to observe. Likewise, cognitive crafting occurs within employees' minds, which is also difficult to observe. Thus, self-reported measures might be appropriate to capture employee

job crafting because focal employees know what they do in their daily work activities better than anyone else. Indeed, there is evidence that using self-reported measures to assess employee proactivity is a valid approach (Ghitulescu, 2013; Parker, Williams, & Turner, 2006). In addition, annual household income was used as a proxy to measure employee status, which is also a limitation regarding the measurement. Whereas a low level of annual household income approximates low employee status, there is a possibility that a high level of annual income represents both high employee status and low employee status with the contribution of other family members' income. To mitigate this limitation, we carefully analyze our data using both the full sample ($N = 564$) and a subsample containing only employees who were single and did not live with their parents ($N = 172$), obtaining similar results in both samples. In addition, using the objective measure mitigated same-source bias, as other variables were collected through self-reported measures. Nonetheless, future research could use more accurate measures of employee status.

Another potential limitation of our studies is the survey design, which was essentially correlational. Therefore, our data provide limited support for causal inferences. For example, there might be potential reverse causality in the relationship between job autonomy and job crafting as Tims et al. (2013) found. This potential reverse causality was somewhat mitigated in Study 2 in which job autonomy was measured two months before job crafting was measured. Nonetheless, future research could rigorously examine the causal relationships using a longitudinal study design. Common method variance might also be an issue because most data were collected from single sources. However, we collected data at different points in time to alleviate the potential for common method variance (Podsakoff et al., 2003). We also conducted Harman's single-factor test to ensure that common method variance was not a serious issue. Moreover, for the findings on significant interaction effects, especially complex ones, such as the three-way interaction, the common method bias is less likely to be relevant

(Evans, 1985; Spector, 2006).

We expect future research to further advance the socially embedded framework of job crafting and to contribute to the deeper understanding of the bottom-up and employee initiated change in the workplace. For example, although our study adds value to the socially embedded perspective by providing new empirical evidence, some of our theory and findings may not seem to be perfectly compatible with the previous research. In fact, we theorized and empirically confirmed that the relationship between job autonomy and job crafting is stronger for high-status rather than low-status employees. However, findings from Berg et al. (2010b) suggest that even high-status employees under a high level of job autonomy may encounter some challenges to job crafting other than those related to social interactions. Thus, future research could further explore the mechanism that promotes job crafting by looking at other variables that moderate or mediate the relationship between key antecedents and employee job crafting.

In addition, future research could examine other variables that were not examined in our study, especially those directly related to organizational change, as job crafting can be considered as employee reactions to organizational change (Oreg, Vakola, & Armenakis, 2011) and the recent job crafting researchers have begun to address this issue (e.g., Petrou et al., 2015, 2016). As for contextual facilitators of employee job crafting, future studies may include factors such as organizational structure and culture (Walsh, 2004) and positive organizational practices (Cameron, Mora, Leutscher, & Calarco, 2011). Accumulating empirical findings regarding contextual facilitators of job crafting will provide critical contributions to the literature. Second, individual difference factors other than social skill could also be investigated in the future. The candidate variables include relational orientation (Leung, Chen, Zhou, & Lim, 2014) and emotional intelligence (Sheldon, Dunning, & Ames, 2014), both of which are related to the social interactions in the workplace. Individual

difference factors related to organizational change, such as coping style and dispositional resistance to change (Oreg, 2003; Oreg et al., 2011), could also be worth examining in the future.

In conclusion, we expect that job crafting as the bottom-up and employee-initiated change to their work remains a fruitful research topic. The elaboration of job crafting theory and further accumulation of empirical evidence would contribute to the field of organizational change.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Anderson, C., John, O. P., Keltner, D., & Kring, A. M. (2001). Who attains social status? Effects of personality and physical attractiveness in social groups. *Journal of Personality and Social Psychology*, 81, 116-132. doi: 10.1037/0022-3514.81.1.116
- Andersson, U., Cuervo-Cazurra, A., & Nielsen, B. B. (2014). From the Editors: Explaining interaction effects within and across levels of analysis. *Journal of International Business Studies*, 45, 1063-1071. doi:10.1057/jibs.2014.50
- Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25, 293-315. doi: 10.1177/014920639902500303
- Ashforth, B. E., & Kreiner, G. E. (1999). "How can you do it?" Dirty work and the challenge of constructing a positive identity. *Academy of Management Review*, 24, 413-434. doi: 10.5465/AMR.1999.2202129
- Bakker, A. B. (2010). Engagement and "job crafting": Engaged employees create their own great place to work. In S. L. Albrecht (Ed.), *Handbook of employee engagement: Perspectives, issues, research and practice* (pp. 229-244). Glos, UK: Edward Elgar.
- Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, 65, 1359-1378. doi: 10.1177/0018726712453471
- Baron, R. A., & Markman, G. D. (2003). Beyond social capital: The role of entrepreneurs' social competence in their financial success. *Journal of Business Venturing*, 18, 41-60. doi: 10.1016/S0883-9026(00)00069-0
- Baron, R. A., & Tang, J. (2009). Entrepreneurs' social skills and new venture performance:

- Mediating mechanisms and cultural generality. *Journal of Management*, 35, 282-306. doi: 10.1177/0149206307312513
- 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. 10.1177/1094428105278021
- Belliveau, M. A., O'Reilly, C. A., III, & Wade, B. (1995). Social capital at the top: Effects of social similarity and status on CEO compensation. *Academy of Management Journal*, 39, 1568-1593. doi: 10.2307/257069
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2008). *What is job crafting and why does it matter?* Ross School of Business, University of Michigan. Accessed on June 20, 2011 at www.bus.umich.edu/Positive/POS-Teaching-and-Learning/Job_Crafting-Theory_to_Practice-Aug_08.pdf
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2013). Job crafting and meaningful work. In B. J. Dik, Z. S. Byrne, & M. F. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 81-104). Washington, DC: American Psychological Association.
- Berg, J. M., Grant, A. M., & Johnson, V. (2010a). When callings are calling: Crafting work and leisure in pursuit of unanswered occupational callings. *Organization Science*, 21, 973-994. doi: 10.1287/orsc.1090.0497
- Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2010b). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31, 158-186. doi: 10.1002/job.645
- Bindl, U. K., & Parker, S. K. (2011). Proactive work behavior: Forward-thinking and change-oriented action in organizations. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology* (Vol. 2, pp. 567-598). Washington, DC: American Psychological Association.

- Black, J. S., & Ashford, S. J. (1995). Fitting in or making jobs fit: Factors affecting mode of adjustment for new hires. *Human Relations*, 48, 421-437. doi: 10.1177/001872679504800407
- Brackett, M. A., Rivers, S. E., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: a comparison of self-report and performance measures of emotional intelligence. *Journal of Personality and Social Psychology*, 91, 780-795. doi: 10.1037/0022-3514.91.4.780
- Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods*. New York, NY: Wiley.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.
- Brunetto, Y., Farr-Wharton, R., & Shacklock, K. (2011). Supervisor-nurse relationships, teamwork, role ambiguity and well-being: Public versus private sector nurses. *Asia Pacific Journal of Human Resources*, 49, 143-164. doi: 10.1177/1038411111400161
- Cameron, K., & McNaughtan, J. (2014). Positive organizational change. *Journal of Applied Behavioral Science*, 50, 445-462. doi: 10.1177/0021886314549922
- Cameron, K., Mora, C., Leutscher, T., & Calarco, M. (2011). Effects of positive practices on organizational effectiveness. *Journal of Applied Behavioral Science*, 47, 266-308. doi: 10.1177/0021886310395514
- Carlson, K. D., & Wu, J. (2012). The illusion of statistical control: Control variable practice in management research. *Organizational Research Methods*, 15, 413-435. doi: 10.1177/1094428111428817
- Caza, B. B. (2007). *Experiences of adversity at work: Toward an identity-based theory of*

- resilience*. Unpublished doctoral dissertation, University of Michigan.
- Cohen, J. (1978). Partialled products are interactions; partialled vectors are curve components. *Psychological Bulletin*, 85, 858-866. doi: 10.1037/0033-2909.85.4.858
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26, 435-462. doi: 10.1177/014920630002600304
- Cunningham, C. E., Woodward, C. A., Shannon, H. S., MacIntosh, J., Lendrum, B., Rosenbloom, D., & Brown, J. (2002). Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational and Organizational Psychology*, 75, 377-392. doi: 10.1348/096317902321119637
- Dahl, E. (1994). Social inequalities in ill-health: The significance of occupational status, education and income-results from a Norwegian survey. *Sociology of Health & Illness*, 16, 644-667. doi: 10.1111/1467-9566.ep11348752
- Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology*, 91, 917-926. doi: 10.1037/0021-9010.91.4.917
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86, 499-512. doi: 10.1037/0021-9010.86.3.499
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36, 305-323. doi: 10.1016/0749-5978(85)90002-0
- Fedor, D. B., Davis, W. D., Maslyn, J. M., & Mathieson, K. (2001). Performance improvement efforts in response to negative feedback: The roles of source power and recipient self-esteem. *Journal of Management*, 27, 79-97. doi: 10.1016/S0149-

2063(00)00087-8

Ferris, G. R., Witt, L. A., & Hochwarter, W. A. (2001). Interaction of social skill and general mental ability on job performance and salary. *Journal of Applied Psychology*, 86, 1075-1082. doi: 10.1037/0021-9010.86.6.1075

French, J. R. P., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150-167). Ann Arbor, MI: Institute for Social Research, University of Michigan.

Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior*, 23, 133-187. doi: 10.1016/S0191-3085(01)23005-6

Fried, Y., Hollenbeck J. R., Slowik, L. H., Tiegs, R. B., & Ben-David, H. A. (1999). Changes in job decision latitude: The influence of personality and interpersonal satisfaction. *Journal of Vocational Behavior*, 54, 233-243. doi: 10.1006/jvbe.1998.1657

Frohman, A. L. (1997). Igniting organizational change from below: The power of personal initiative. *Organizational Dynamics*, 25(3), 39-53. doi: 10.1016/S0090-2616(97)90046-2

Ghitulescu, B. E. (2007). *Shaping tasks and relationships at work: Examining the antecedents and consequences of employee job crafting*. Unpublished doctoral dissertation, University of Pittsburgh.

Ghitulescu, B. E. (2013). Making change happen: The impact of work context on adaptive and proactive behaviors. *Journal of Applied Behavioral Science*, 49(2), 206-245. doi: 10.1177/0021886312469254.

Giebels, E., de Reuver, R. S., Rispens, S., & Ufkes, E. G. (2016). The critical roles of task conflict and job autonomy in the relationship between proactive personalities and innovative employee behavior. *Journal of Applied Behavioral Science*, 52, 320-

341. doi: 10.1177/0021886316648774

Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference.

Academy of Management Review, 32, 393-417. doi: 10.2307/20159308

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in*

Organizational Behavior, 28, 3-34. doi: 10.1016/j.riob.2008.04.002

Grant, A. M., & Parker, S. K. (2009). Redesigning work design theories: The rise of relational

and proactive perspectives. *Academy of Management Annals*, 3, 317-375. doi:

10.1080/19416520903047327

Grant, A. M., Parker, S., & Collins, C. (2009). Getting credit for proactive behavior:

Supervisor reactions depend on what you value and how you feel. *Personnel*

Psychology, 62, 31-55. doi: 10.1111/j.1744-6570.2008.01128.x

Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance:

Positive behavior in uncertain and interdependent contexts. *Academy of*

Management Journal, 50, 327-347. doi: 10.5465/AMJ.2007.24634438

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a

theory. *Organizational Behavior and Human Performance*, 16, 250-279. doi:

10.1016/0030-5073(76)90016-7

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.

Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey

questionnaires. *Organizational Research Methods*, 1, 104-121. doi:

10.1177/109442819800100106

Hochwarter, W. A., Witt, L. A., Treadway, D. C., & Ferris, G. R. (2006). The interaction of

social skill and organizational support on job performance. *Journal of Applied*

Psychology, 91, 482-489. doi: 10.1037/0021-9010.91.2.482

Hogan, R., & Shelton, D. (1998). A socioanalytic perspective on job performance. *Human*

- Performance*, 11, 129-144. doi: 10.1080/08959285.1998.9668028
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *Journal of Applied Behavioral Science*, 43, 232-255. doi: 10.1177/0021886306295295
- Hornung, S., & Rousseau, D. M. (2007). Active on the job—proactive in change: How autonomy at work contributes to employee support for organizational change. *Journal of Applied Behavioral Science*, 43, 401-426. doi: 10.1177/0021886307307555
- Idaszak, J. R., & Drasgow, W. F. (1987). A revision of the job diagnostic survey: Elimination of measurement artifacts. *Journal of Applied Psychology*, 72, 69-74. doi: 10.1037/0021-9010.72.1.69
- Intelligence. (2006). *Survey on part-time work by students 2006*. Tokyo, Japan: Intelligence Ltd.
- JPC-SED (Japan Productivity Center for Socio-Economic Development). (2011). *The survey on compensation across abilities and jobs*. Tokyo, Japan: Japan Productivity Center for Socio-Economic Development (in Japanese).
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265-284. doi: 10.1037/0033-295X.110.2.265
- Kulik, C. T., Oldham, G. R., & Hackman, J. R. (1987). Work design as an approach to person–environment fit. *Journal of Vocational Behavior*, 31, 278-296. doi: 10.1016/0001-8791(87)90044-3
- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in early childhood education: The role of job crafting. *Academy of Management Journal*, 52, 1169-1192. doi: 10.5465/AMJ.2009.47084651
- Leana, C. R., & Meuris, J. (2015). Living to work and working to live: Income as a driver of

- organizational behavior. *Academy of Management Annals*, 9, 55-95. doi: 10.1080/19416520.2015.1007654
- Lee, T. W., Mitchell, T. R., & Sablinski, C. J. (1999). Qualitative research in organizational and vocational psychology, 1979-1999. *Journal of Vocational Behavior*, 55, 161-187. doi: 10.1006/jvbe.1999.1707
- Leung, K., Chen, Z., Zhou, F., & Lim, K. (2014). The role of relational orientation as measured by face and renqing in innovative behavior in China: An indigenous analysis. *Asia Pacific Journal of Management*, 31, 105-126. doi: 10.1007/s10490-011-9277-1
- Lu, C. Q., Wang, H. J., Lu, J. J., Du, D. Y., & Bakker, A. B. (2014). Does work engagement increase person–job fit? The role of job crafting and job insecurity. *Journal of Vocational Behavior*, 84, 142-152. doi: 10.1016/j.jvb.2013.12.004
- Lyons, P. (2008). The crafting of jobs and individual differences. *Journal of Business Psychology*, 23, 25-36. doi: 10.1007/s10869-008-9080-2
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, 2, 351-398. doi: 10.1080/19416520802211628
- Mathieu, J. E., & Farr, J. L. (1991). Further evidence for the discriminant validity of measures of organizational commitment, job involvement, and job satisfaction. *Journal of Applied Psychology*, 76, 127-133. doi:10.1037/0021-9010.76.1.127
- McClelland, G. P., Leach, D. J., Clegg, C. W., & McGowan, I. (2014). Collaborative crafting in call centre teams. *Journal of Occupational and Organizational Psychology*, 87, 464-486. doi: 10.1111/joop.12058
- Ministry of Health, Labour and Welfare. (2014). *Basic survey on wage structure*. Tokyo, Japan: Ministry of Health, Labour and Welfare (In Japanese).

- Morgeson, F. P., Delaney-Klinger, K. A., & Hemingway, M. A. (2005). The importance of job autonomy, cognitive ability, and job-related skill for predicting role breadth and job performance. *Journal of Applied Psychology, 90*, 399-406. doi: 10.1037/0021-9010.90.2.399
- National Personnel Authority. (2014). *The survey on compensation across jobs and occupations in the private sector*. Tokyo, Japan: National Personnel Authority (in Japanese).
- Nicholson, N. (1984). A theory of work role transitions. *Administrative Science Quarterly, 29*, 172-191. doi: 10.2307/2393172
- Norton, P. J., & Hope, D. A. (2001). Analogue observational methods in the assessment of social functioning in adults. *Psychological Assessment, 13*, 59-72. doi: 10.1037/1040-3590.13.1.59
- Oreg, S. (2003). Resistance to change: developing an individual differences measure. *Journal of Applied Psychology, 88*, 680-693. doi: 10.1037/0021-9010.88.4.680
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change A 60-year review of quantitative studies. *Journal of Applied Behavioral Science, 47*, 461-524. doi: 10.1177/0021886310396550
- Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology, 83*, 835-852. doi: 10.1037/0021-9010.83.6.835
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology, 91*, 636-652. doi: 10.1037/0021-9010.91.3.636
- Petrou, P., Demerouti, E., Peeters, M. C. W., Schaufeli, W. B., & Hetland, J. (2012). Crafting a job on a daily basis: Contextual correlates and the link to work engagement.

- Journal of Organizational Behavior*, 33, 1120-1141. doi: 10.1002/job.1783
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2015). Job crafting in changing organizations: Antecedents and implications for exhaustion and performance. *Journal of Occupational Health Psychology*, 20, 470-480. doi: 10.1037/a0039003
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2016). Crafting the change: The role of employee job crafting behaviors for successful organizational change. *Journal of Management*. doi: 10.1177/0149206315624961
- Podsakoff, P. M., MacKenzie, S. M., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903. doi: 10.1037/0021-9010.88.5.879
- Rafferty, A. E., & Simons, R. H. (2006). An examination of the antecedents of readiness for fine-tuning and corporate transformation changes. *Journal of Business and Psychology*, 20, 325-350. doi:10.1007/s10869-005-9013-2
- Reiche, B. S., Cardona, P., Lee, Y. T., Canela, M. Á., Akinnukawe, E., Briscoe, J. P., ... & Grenness, T. (2014). Why do managers engage in trustworthy behavior? A multilevel cross-cultural study in 18 countries. *Personnel Psychology*, 67, 61-98. doi: 10.1111/peps.12038
- Riggio, R. E., & Zimmerman, J. A. (1991). Social skills and interpersonal relationships: Influences on social support and support seeking. In W. H. Jones & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 2, pp. 133-155). London, UK: Jessica Kingsley Press.
- Robbins, T. L., & DeNisi, A. S. (1994). A closer look at interpersonal affect as a distinct influence on cognitive processing in performance evaluations. *Journal of Applied Psychology*, 79, 341-353. doi: 10.1037/0021-9010.79.3.341

- Rosen, B., & Jerdee, T. H. (1979). Influence of employee age, sex, and job status on managerial recommendations for retirement. *Academy of Management Journal*, 22, 169-173. doi: 10.2307/255490
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1-36. Retrieved from <http://www.jstatsoft.org/v48/i02/>
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal*, 44, 219-237. doi: 10.2307/3069452
- Sheldon, O. J., Dunning, D., & Ames, D. R. (2014). Emotionally unskilled, unaware, and uninterested in learning more: Reactions to feedback about deficits in emotional intelligence. *Journal of Applied Psychology*, 99, 125-137. doi: 10.1037/a0034138
- Shin, J., Seo, M. G., Shapiro, D. L., & Taylor, M. S. (2015). Maintaining employees' commitment to organizational change: The role of leaders' informational justice and transformational leadership. *Journal of Applied Behavioral Science*, 51, 501-528. doi: 10.1177/0021886315603123
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9, 221-232. doi: 10.1177/1094428105284955
- Takeishi, E. (2002). The mainstreaming of non-standard workers into the labor force, and changes in employment management. *The Journal of NLI Research Institute*, 26, 1-36.
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, 36, 1-9. doi: 10.4102/sajip.v36i2.841
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80, 173-186. doi: 10.1016/j.jvb.2011.05.009

- Tims, M., Bakker, A. B., & Derks, D. (2013a). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology, 18*, 230-240. doi: 10.1037/a0032141
- Tims, M., Bakker, A. B., & Derks, D. (2015). Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology, 24*, 914-928. doi: 10.1080/1359432X.2014.969245
- Tims, M., Bakker, A. B., Derks, D., & van Rhenen, W. (2013b). Job crafting at the team and individual level: Implications for work engagement and performance. *Group & Organization Management, 38*, 427-454. doi: 10.1177/1059601113492421
- Van Dam, K., Oreg, S., & Schyns, B. (2008). Daily work contexts and resistance to organisational change: The role of leader-member exchange, development climate, and change process characteristics. *Applied Psychology: An International Review, 57*, 313-334. doi: 10.1111/j.1464-0597.2007.00311.x
- Walsh, K. (2004). Interpreting the impact of culture on structure: The role of change processes. *Journal of Applied Behavioral Science, 40*, 302-322. doi: 10.1177/0021886304266845
- Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology, 85*, 132-142. doi: 10.1037/0021-9010.85.1.132
- Wayne, S. J., Liden, R. C., Graf, I. K., & Ferris, G. R. (1997). The role of upward influence tactics in human resource decisions. *Personnel Psychology, 50*, 979-1006. doi: 10.1111/j.1744-6570.1997.tb01491.x
- Witt, L. A., & Ferris, G. R. (2003). Social skill as moderator of the conscientiousness-performance relationship: Convergent results across four studies. *Journal of Applied Psychology, 88*, 809-820. doi: 10.1037/0021-9010.88.5.809

- Wrzesniewski, A. (2003). Finding positive meaning in work. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 296-308). San Francisco, CA: Berrett-Koehler.
- Wrzesniewski, A., Berg, J. M., & Dutton, J. E. (2010). Turn the job you have into the job you want. *Harvard Business Review*, June, 114-117.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26, 179-201. doi: 10.5465/AMR.2001.4378011
- Wrzesniewski, A., Dutton, J. E., & Debebe, G. (2003). Interpersonal sensemaking and the meaning of work. *Research in Organizational Behavior*, 25, 93-135. doi: 10.1016/S0191-3085(03)25003-6

Table 1

Descriptive statistics and correlations of all study variables for part-time employees

	Mean	SD	1	2	3	4	5	6	7
1. Job autonomy	4.44	1.38	--						
2. Social skill	4.35	.84	.05	--					
3. Job crafting	4.58	.90	.39**	.30**	--				
4. Gender	.72	.45	.06	-.01	.01	--			
5. Age	21.21	2.07	.02	.08	.14**	.12*	--		
6. Work experience	23.34	12.76	.26**	.09	.26**	.08	.44**	--	
7. Work hours	11.61	8.70	.04	.08	.24**	.04	.16**	.34**	--

Notes. $N = 509$.

Gender: 0 = female; 1 = male.

* $p < .05$. ** $p < .01$.

Table 2

Results of moderated regression analyses for part-time employees

Variables	Job crafting	
	Model 1	Model 2
Control variables		
Gender	-.01	-.02
Age	.05	.05
Work experience	.07	.07
Work hours	.15**	.15**
Independent variables		
Job autonomy	.39**	.39**
Social skill	.25**	.24**
Interaction		
Job autonomy \times social skill	—	.09*
Total R^2	.29	.30
ΔR^2	—	.01*

Notes. $N = 509$.* $p < .05$. ** $p < .01$.

In all analyses, the control variables were entered in the first step. Owing to space considerations, the beta values of eight dummy variables were not reported here but are available from the authors upon request.

Job autonomy, social skill, and their interaction were centered prior to analysis.

ΔR^2 is the change in R^2 for the addition of the job autonomy \times social skill interaction to the regression.

Table 3

Descriptive statistics and correlations of all study variables for full-time employees

	Mean	SD	1	2	3	4	5	6	7	8
1. Job autonomy	4.31	1.04	--							
2. Social skill	3.94	.74	.19**	--						
3. Employee status	3.61	1.23	.18**	.15**	--					
4. Job crafting	4.31	.82	.33**	.28**	.15**	--				
5. Gender	.70	.46	.17**	-.00	.04	.05	--			
6. Age	40.84	9.89	.14**	.04	.41**	.09*	.13**	--		
7. Education	2.66	5.85	-.04	-.00	-.06	-.03	-.06	.06	--	
8. Marital status	.62	.49	.16**	.05	.34**	.04	.32**	.38**	.04	--

Notes. $N = 564$.

Gender: 0 = female; 1 = male.

Employee status was measured by participants' annual household income (JPY): 1 = ~ 3 million; 2 = 3 ~ 5 million; 3 = 5 ~ 7 million; 4 = 7 ~ 10 million; 5 = 10 ~ 15 million; 6 = 15 ~ million.

Marital status: 0 = single; 1 = married.

* $p < .05$. ** $p < .01$.

Table 4

Results of moderated regression analyses for full-time employees

Variables	Job crafting				
	Model 1	Model 2	Model 3	Model 4	Model 5
Control variables					
Gender	.01	.01	.02	.01	.02
Age	.04	.04	.02	.04	.02
Education	-.01	-.01	-.01	-.01	-.01
Marital status	-.05	-.05	-.06	-.05	-.05
Independent variables					
Job autonomy	.28**	.28**	.28**	.28**	.29**
Social skill	.22**	.22**	.22**	.22**	.24**
Employee status	.07	.07	.07	.07	.08
Interactions					
Job autonomy × social skill	—	-.00	—	—	-.03
Job autonomy × employee status	—	—	.14**	—	.15**
Social skill × employee status	—	—	—	.02	-.02
Job autonomy × social skill × employee status	—	—	—	—	-.08*
Total R^2	.17	.17	.19	.17	.19
ΔR^2	—	.00	.02**	.00	.01*

Notes. $N = 564$.* $p < .05$. ** $p < .01$.

In all analyses, the control variables were entered in the first step.

Job autonomy, social skill, employee status, and their interactions were centered prior to analysis.

 ΔR^2 is the change in R^2 for the addition of the job autonomy × social skill, job autonomy × employee status, social skill × employee status, or job autonomy × social skill × employee status interactions to the regression.

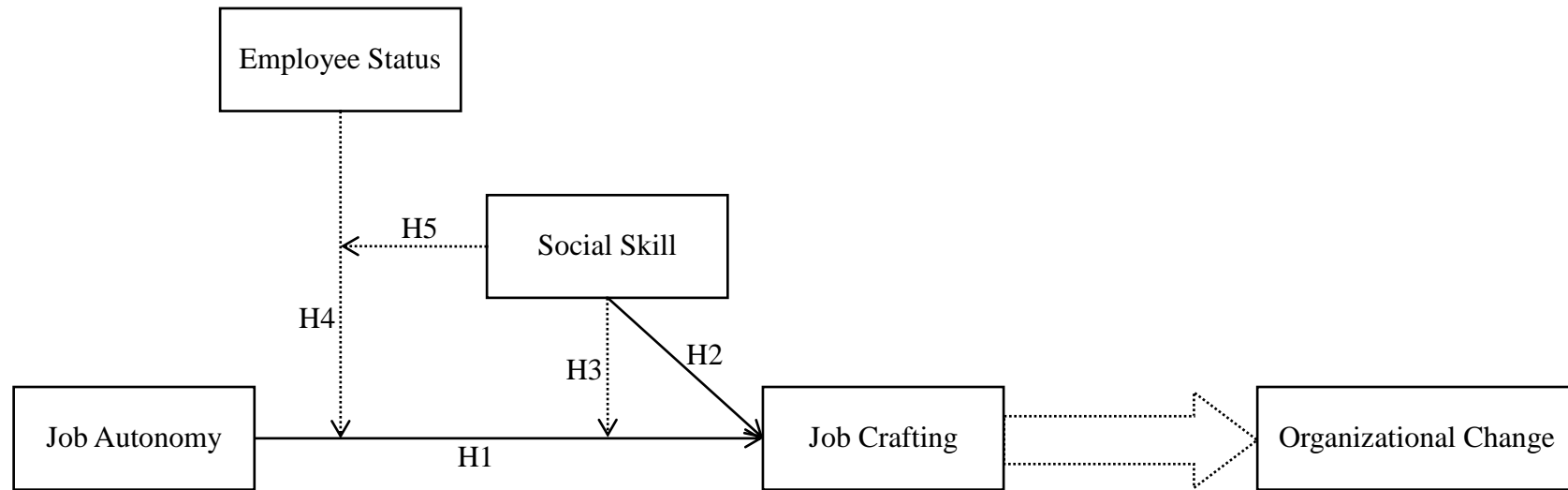


Figure 1. Hypothesized Model

Notes.

Solid lines represent the direct effect of independent variables and dotted lines represent the interacting effect.

We integrated the possible consequence (i.e., organizational change) of job crafting, which was not examined in this paper.

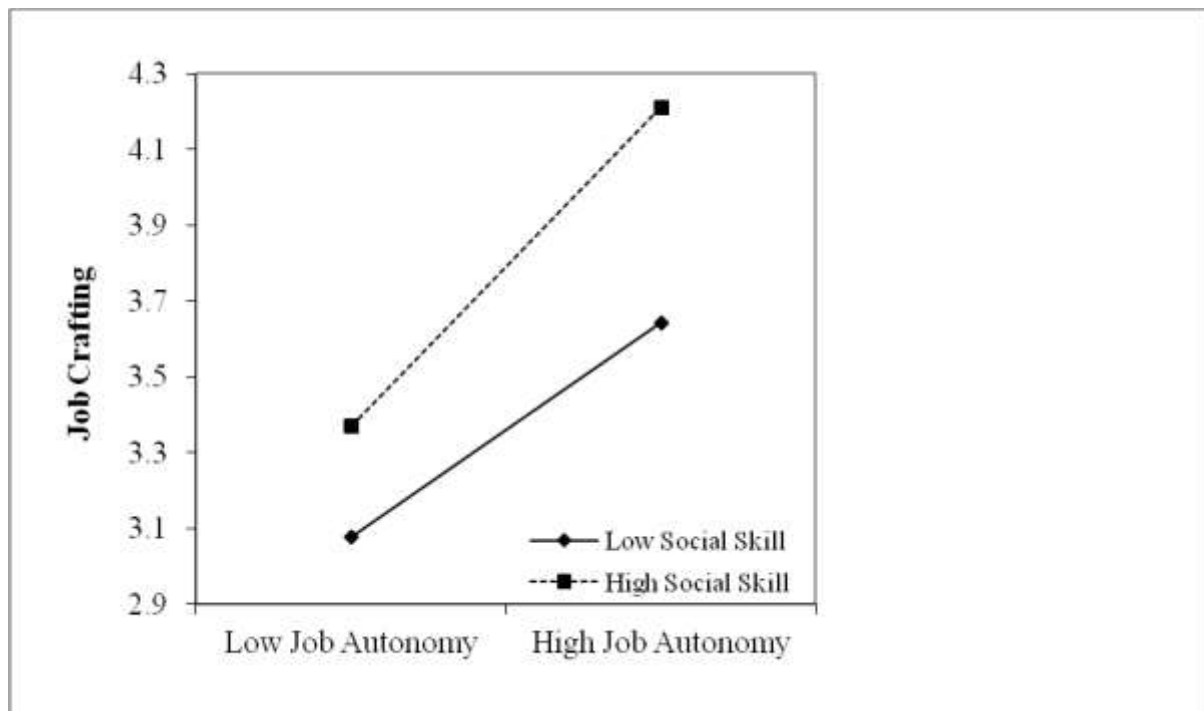


Figure 2. Interaction of job autonomy and social skill on job crafting.

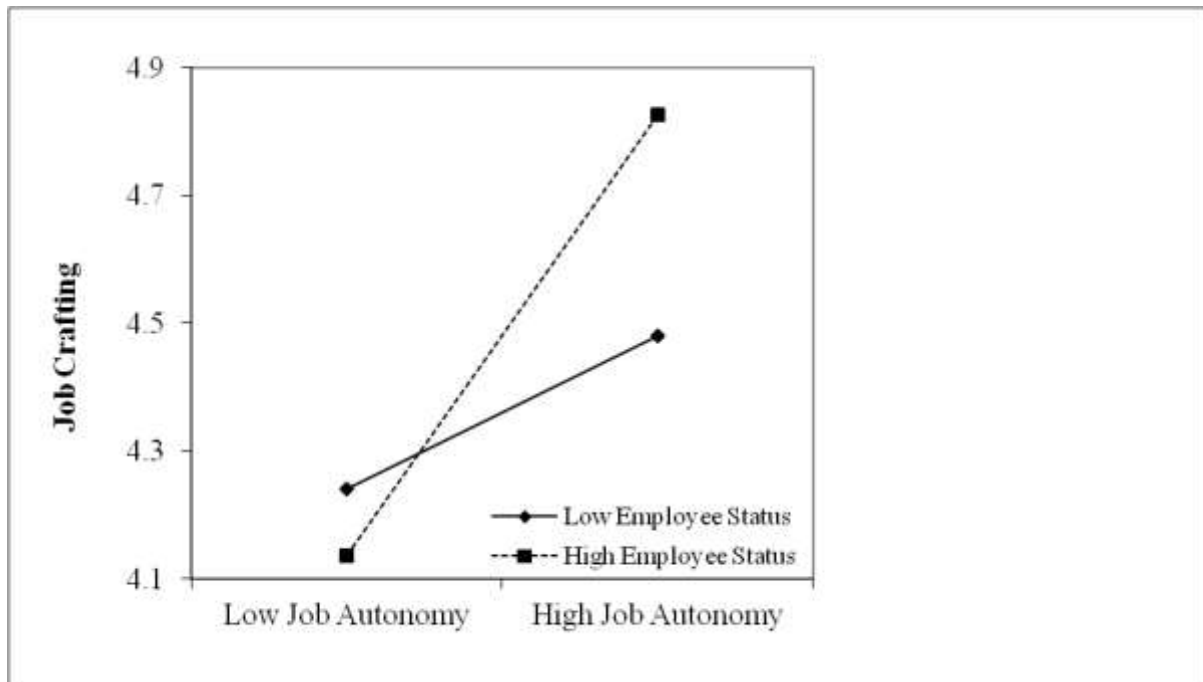


Figure 3. Interaction of job autonomy and employee status on job crafting.

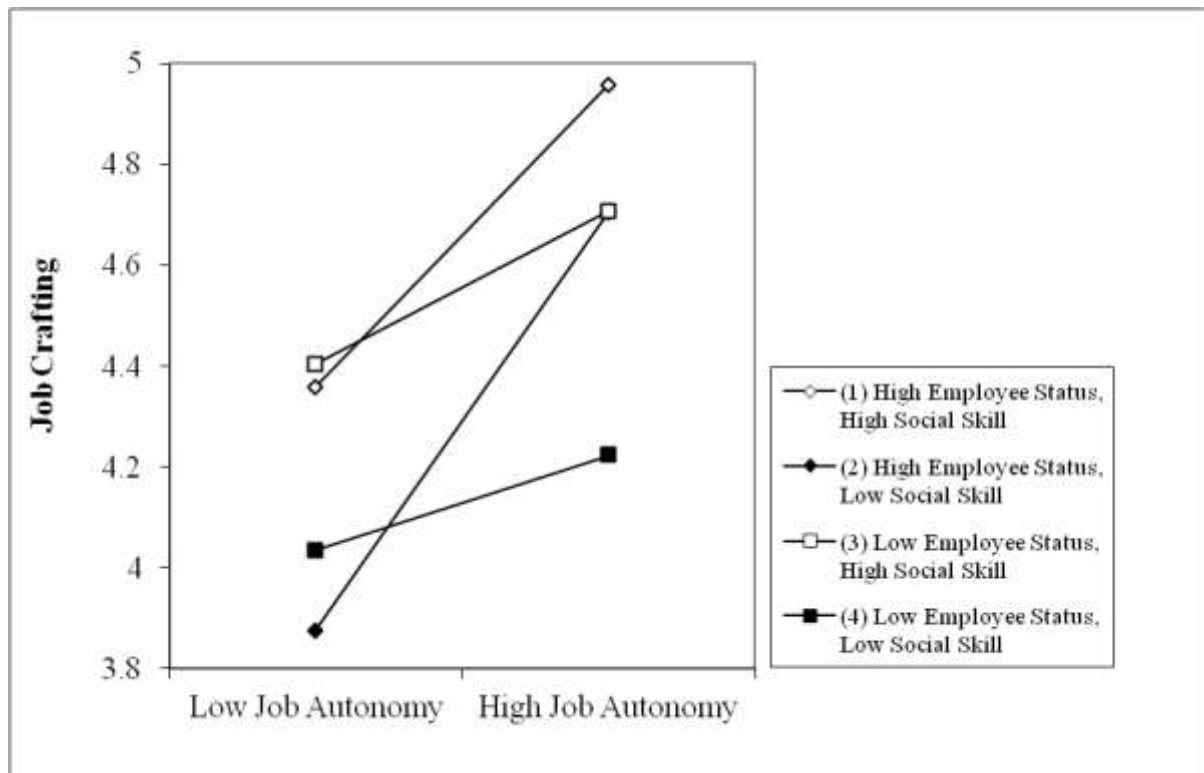


Figure 4. Three-way interaction of job autonomy, social skill, and employee status on job crafting.

Appendix

English translation of job crafting scale used in the present studies

Task crafting

Add or reduce tasks so that my job can be performed more smoothly.

Change the content and/or procedure of my job to be more desirable.

Add new tasks if necessary.

Relational crafting

Actively interact with people through my job.

Increase the number of people to interact with through my job.

Understand the situations of people who interact with me through my job and consider them when performing my job.

Cognitive crafting

Reframe my job as significant and meaningful.

View my job as an integrated whole rather than a set of discrete tasks.

Reframe the purpose of my job as socially significant.