Job Crafting

Job crafting has been a focal research topic in job design literature since the early 2000s. Employees' initiated job crafting behavior (e.g., seeking resources and seeking challenges) has been positively linked to employee health, job attitude (e.g., job satisfaction), well-being (e.g., work engagement), and performance (for meta-analytic reviews). It also brings substantial benefits for organizations, such as a higher level of group and organizational performance. Accordingly, increasing research has investigated various ways to stimulate employees' job crafting behavior. In this respect, cumulative evidence has shown that job characteristics and personal traits are important factors that influence employee job crafting (for reviews). For example, proactive personality, self-efficacy, regulatory focus, job autonomy, and job resources were positively related to employee job crafting.

Keywords: job crafting, leadership, meta-analysis

1. Introduction

Job crafting has been a focal research topic in job design literature since the early 2000s[1]. Employees' initiated job crafting behavior (e.g., seeking resources and seeking challenges) has been positively linked to employee health, job attitude (e.g., job satisfaction), well-being (e.g., work engagement), and performance (for meta-analytic reviews, see[2][3]). It also brings substantial benefits for organizations, such as a higher level of group and organizational performance[4]. Accordingly, increasing research has investigated various ways to stimulate employees' job crafting behavior. In this respect, cumulative evidence has shown that job characteristics and personal traits are important factors that influence employee job crafting (for reviews, see [2][5]). For example, proactive personality[6], self-efficacy[7], regulatory focus[3], job autonomy[2], and job resources[8] were positively related to employee job crafting.

While prior studies have provided valuable insights into how personal traits/abilities and job characteristics linked to employee job crafting [2][5], a recent and growing number of studies examined how social factors influence employee job crafting (e.g., [9][5][7]). Social elements of work may play a crucial role in influencing employees' behavior[10] [11]. It represents social connections that employees access in work domains (e.g., leaders, colleagues, customers, clients, and patients) and non-work domains (e.g., families and friends)[11]. The interactive societal environment encompasses opportunities and resources that are vital to foster individual self-growth, career success, and need satisfaction [12][13][14]]. Understanding how employees learn from their social connections may be as important as understanding who they are and what their jobs look like. While meta-analyses and review articles already exist in the area of job crafting (i.e., [2][5][3][15][5]), a comprehensive review of social factors and job crafting is still absent. To our knowledge, Tims and Parker (2020) took such an endeavor but their attention was limited to how colleagues respond to the crafter's behavior. Likewise, in a review article of Zhang and Parker (2019) [5], the social factors only include leaderships (e.g., transformational and empowering leadership). Hence, it is concluded that these studies do not give a full overview of the impact of social factors on job crafting. More importantly, not all empirical studies find favorable results of social factors on job crafting [5] [7,16]. For example, while some studies showed a positive relationship between transformational leadership and promotion-focused job crafting [16][17][18], others showed a nonsignificant relationship[18][19]. Similarly, Loi et al. (2019)[20] indicated a positive relationship between Leader-Member-Exchange (LMX) and job crafting, whereas Radstaak and Hennes (2017)[21] found a negative correlation with increasing structural resources. Overall, the effect of social factors on job crafting looks quite complex and uncertain. We have limited knowledge about the extent to which social factor has a stronger and significant impact on employee job crafting. Therefore, a meta-analysis will help clarify the relationship between social factors and job crafting and estimate the extent to which social factor is more important to employee job crafting.

The main purpose of this study is to provide a meta-analytic review of the associations between social factors and employee job crafting, including how job crafting acts as a mediator linking social factors and work outcomes. To organize this effort, we integrate extant research into a conceptual model that extends previous reviews and meta-

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2. Social Factors and Job Crafting

Due to dependency of effect sizes in our study (i.e., some studies reported more than one effect sizes of different job crafting behaviors), we used the three-level meta-analysis approach to test the overall effect of social factors on job crafting. The results indicated that overall social factors are positively related to promotion-focused job crafting (k = 68, ρ = 0.372). About 5.8% of the overall variance can be attributed to level 1 (i.e., sampling variance), 73.8% to level 2 (variance between effect sizes extracted from the same study) and as much as 20.4% to level 3 (variance between studies). And the three-level Random Model would have a better fit, with the Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC) being lower for this model (likelihood-ratio test = 45.56, $p < 0.001$). The difference is significant, suggesting we should include this level into our analysis.

Hypothesis 1 states that Social factors impact Job crafting. Meta-analysis results showed that most of the variance was caused by the Level 2 variance (i.e., different types of social factors and job crafting behaviors), thus we investigated how specific social factors related to specific job crafting behaviors. Table 1 reports the relationships between social factors and job crafting when considering job crafting as promotion-focused job crafting and prevention-focused job crafting. Table 2 reports the relationships between social factors and job crafting when considering job crafting as increasing structural resources, increasing social resources, and increasing challenges demands. For this analysis, we only included one effect size from each sample. Meta-analyses results in Tables 1 demonstrated that social factors were positively related to employee promotion-focused job crafting (k = 32, ρ = 0.361, CI = (0.292, 0.426)). The subgroup analysis showed that social factors of coworker support (k = 3, ρ = 0.237), leadership (k = 22, ρ = 0.400), and LMX (k = 7, ρ = 0.270) were positively associated with promotion-focused job crafting. And leadership showed a stronger correlated with Management (p = 0.026), but there is no significant difference between coworker and LMX (t = 0.207, ρ = 0.648). When we focused on the associations between social factors and specific job crafting, which showed that social factors were positively related to promotion-focused job crafting of increasing structural resources (k = 6, ρ = 0.178, CI = (0.058, 0.293)), increasing social resources (k = 10, ρ = 0.332, CI = (0.246, 0.414)), and increasing challenge demands (k = 11, ρ = 0.210, CI = (0.138, 0.277)) (see Table 2). Hypothesis 1a was supported.

Unexpectedly, we found insignificant effect of social factors on prevention-oriented job crafting (k = 9, ρ = 0.022, CI = (−0.091, 0.134)) (see Table 1). Hypothesis 1c was not supported.

Due to the lack of sample sizes on destructive social factors, such as destructive leaders, conflicts with clients and families, Hypothesis 1b and 1d were not tested.

Table 1. Summary of meta-analytic relationships: social factors as correlates of job crafting (H1).

Variables	k	N	r	ρ	SEρ	Lower	Upper	p	Q	I²	H²	zFisher	ρ sensitivity	ρTrim-and-fill	ρmeasurement
Promotion focus job crafting															
Overall social factors	32	9263	0.332	0.361	0.089	0.292	0.426	<0.0001	404.067	92.78%	13.840	0.378	0.341	32 / 0.261	0.416
Coworker support	3	519	0.231	0.237	0.068	0.108	0.358	0.0004	4.674	57.42%	2.350	0.242	no outlier	3 / 0.237	0.311
Leadership overall	22	6952	0.364	0.400	0.051	0.315	0.480	<0.0001	317.887	94.15%	17.119	0.424	0.385	22 / 0.400	0.456

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Note: *, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.001$; k = number of independent samples included; ρ = sample-size-weighted mean observed correlation; $SE\rho$ = standard error for population estimate; I^2 is an index of heterogeneity computed as the percentage of variability in effects sizes that are due to true differences among the studies; Q provides information on whether there is statistically significant heterogeneity (i.e., yes or no heterogeneity). Overall social factors-two level-single = only include one effect size for each study; Overall social factors-two level-nested = for some studies included several effect sizes, which may not independent; ρ _sensitivity analysis = outlier removed sensitivity analyses; $kTrim$-and fill = number of independent samples included for trim-and-fill analysis; $\rho_{Trim\text{-}and\ fill}$ = trim-and-fil results; ρ _measurement = mean score correlation (corrected for unreliability for both variables and sampling error variance).

Table 2. Summary of meta-analytic relationship: social factors as correlates of specific job crafting behaviors (H1).

Variables	k	N	r	ρ	SEρ	Lower	Upper	p	Q	I²	H²	zFisher	ρ _sensitivity analysis	kTrim-and Fill	ρTrim-and Fill	ρ _measurement
Increasing challenge job demands																
Overall social factors	11	3195	0.201	0.209	0.037	0.138	0.277	<0.0001	35.737 ***	75.66%	4.11	0.212	0.186	12	0.186	0.255
empowering leadership	4	807	0.290	0.305	0.071	0.174	0.426	<0.0001	9.526 *	73.17%	3.73	0.316	no outliers	4	0.306	0.353
transformational leadership	3	1041	0.228	0.234	0.036	0.165	0.300	<0.0001	2.185 (0.34)	22.27%	1.29	0.238	no outliers	5	0.190	0.299
Increasing social job resources																
Overall social factors	10	3024	0.315	0.332	0.048	0.246	0.414	<0.0001	55.198 ***	84.95%	6.64	0.346	0.332	11	0.348	0.396

	k		ρ		SEρ				Q	I²			ρ_sensitivity	kTrim-and fill	ρTrim-and fill	ρ_measurement
empowering leadership	4	807	0.343	0.368	0.104	0.181	0.530	0.0002	20.701 ***	87.40%	7.94	0.387	no outliers	4	0.369	0.432
transformational leadership	3	1055	0.348	0.367	0.096	0.196	0.517	<0.0001	13.852 **	88.39%	8.62	0.385	0367	3	0.367	0.451
Increasing structural job resources																
Overall social factors	6	2357	0.173	0.178	0.062	0.058	0.293	0.0039	44.879 ***	88.88%	8.99	0.180	0.178	6	0.178	0.215
transformational	3	1195	0.251	0.260	0.096	0.078	0.425	0.0056	18.799 ***	90.50%	10.52	0.266	0.260	3	0.260	0.312

Note: *, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.001$; k = number of independent samples included; ρ = sample-size-weighted mean observed correlation; $SE\rho$ = standard error for population estimate; I^2 is an index of heterogeneity computed as the percentage of variability in effects sizes that are due to true differences among the studies; Q provides information on whether there is statistically significant heterogeneity (i.e., yes or no heterogeneity). Overall social factors-two level-single = only include one effect size for each study; Overall social factors-two level-nested = for some studies included several effect sizes, which may not independent; ρ_sensitivity analysis = outlier removed sensitivity analyses; kTrim-and fill = number of independent samples included for trim-and-fill analysis; $\rho_{Trim-and\ fill}$ = trim-and-fil results; ρ_measurement = mean score correlation (corrected for unreliability for both variables and sampling error variance).

To present more detailed results of specific social factors on job crafting, below we report how specific social factor influences employee job crafting behaviors.

2.1. Leadership and Job Crafting

We found that leadership was positively related to employee promotion-focused job crafting behavior (k = 22, ρ = 0. 400, CI = (0.314, 0.480)). Specifically, leadership styles of empowering (k = 7, ρ = 0.338), transformational (k = 5, ρ = 0.270), charismatic (k = 3, ρ = 0.160), servant (k = 3, ρ = 0.686), and transactional (k = 3, ρ = 0.236) are positively related to promotion-focused job crafting. When we consider how leaderships are related to specific job crafting behaviors. We found that empowering leadership and transformational leadership are two salient social factors. In particular, empowering leadership was positively related to increasing social resources (k = 4, ρ = 0.368, CI = (0.181, 0.530)) and increasing challenge demands (k = 4, ρ = 0.305, CI = (0.174, 0.426)), respectively. Transformational leadership was positively related to increasing social resources (k = 3, ρ = 0.367, CI = (0.196, 0.517)), increasing structural resources (k = 3, ρ = 0.260, CI = (0.078, 0.425)), and increasing challenges demands (k = 3, ρ = 0.234, CI = (0.165, 0.300)).

In addition, some of our included studies tested the effect of team-level leadership on job crafting (which were not included in the meta-analysis to calculate the pooled effect size). For instance, team level servant leadership (Luu et al., 2019; Tuan et al., 2020), charismatic (Luu et al., 2019) are positively related to job crafting. Besides, in our reviewed articles we also found that some destructive leadership styles have a negative effect on employee job crafting. For instance, abusive supervision (r = –0.24, Luu et al., 2019), leader's need for structure (r = –0.14, Solberg and Wong, 2016), and paternalistic leadership/ authoritarianism (r = –0.26, Tuan, 2018) are negatively related to employee job crafting. These are in line with our Hypothesis 1b.

2.2. Coworkers and Job Crafting

We found that coworker emotional and instrumental social support are positively related to employee promotion-focused job crafting (k = 3, ρ = 0.237, CI = (0.108, 0.358)) (see Table 2). In addition, colleagues' job crafting also influences employee job crafting behaviors. For instance, Bakker et al.[23] showed a reciprocal relationship between dyad members' job crafting behaviors—each of the actor's job crafting behaviors was positively related to the partner's job crafting behaviors. Similarly, Demerouti and Peeters[24] found the transmission of both job crafting dimensions among colleagues. Similar cross-over effect was reported by Peeters, Arts, and Demerouti[25].

In our reviewed articles, we only found one article regarding the factor of clients/customers (r = 0.38, Loi et al., 2029[20]). Due to such little sample size, we did not include this article in our meta-analysis. Moreover, we found that only few studies focused on the associations between family factors and job crafting. For instance, we found that work-family conflict encourages or discourages job crafting by moderating the relationship between tendencies toward workaholism and expansion and contraction-oriented job crafting[26]. Job crafting is positively related to work-family conflict[27], and work-to-family enrichment[20][28][29]. However, the latter three studies treated family factors as outcomes, thus did not focus on how family factors influence job crafting.

In summary, we found that positive social factors especially organizational insiders were positively related to promotion-focused job crafting. Thus, Hypothesis 1a was supported. Whereas the results between social factors and prevention-focused job crafting were insignificant, Hypothesis 1c was not supported. We do not have enough samples to test how negative social factors related to promotion and prevention focused job crafting, thus, our Hypotheses 1b, and d were not tested.