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A multilevel study on servant leadership, job boredom and job crafting

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Abstract

Purpose – The purpose of this paper is to examine cross-level effects of team-level servant leadership on job boredom and the mediating role of job crafting. Cross-level moderating effects of team-level servant leadership were also investigated.

Design/methodology/approach — This longitudinal study employed a multilevel design in a sample of 237 employees, clustered into 47 teams. Servant leadership was aggregated to the team-level to examine the effects of shared perceptions of leadership at T1 on individual-level outcome, namely job boredom, at T2. In addition, mediation analysis was used to test whether team-level servant leadership at T1 can protect followers from job boredom at T2 by fostering job crafting at T2. Cross-level moderating effects of team-level servant leadership at T1 on the relation between job crafting at T2 and job boredom at T2 were also modeled. Findings — Job crafting at T2 mediated the cross-level effect of team-level servant leadership at T1 on job boredom at T2.

Research limitations/implications – The findings suggest that team-level servant leadership predicts less job boredom by boosting job crafting.

Originality/value – This study is the first to assess the effects of servant leadership on job boredom and the mediating role of job crafting. This paper examines job boredom in a multilevel design, thus extending knowledge on its contextual components.

Keywords Longitudinal, Multilevel analysis, Servant leadership, Job crafting, Job boredom **Paper type** Research paper

Job boredom refers to a state of unpleasant passiveness, in which employees lack interest in their work activities, and have difficulties in concentrating on them (Reijseger *et al.*, 2013). Studies on boredom at work have increased in volume over the past decade (Vodanovich and Watt, 2016). Commonly perceived as a product of monotonous working environments in the past (Loukidou *et al.*, 2009), boredom is now acknowledged as employee ill-being, which may emerge in diverse work contexts (Harju and Hakanen, 2016). The effects of the social context of work, such as the team and its leadership, have largely gone unstudied. Hence, little is known of the team-level factors, which may protect individuals from job boredom. The present study set out to extend this knowledge by examining the effects of team-level servant leadership, a leadership style that puts the success of followers first by empowering employees and providing them with the resources they need to excel in their work (Van Dierendonck, 2011), on job boredom.

Job boredom is associated with lacking resources and challenges at work (Reijseger *et al.*, 2013). Hence, the current study investigates whether job crafting, which refers to the proactive changes employees make in their work to increase their job resources and/or challenges (Tims *et al.*, 2012), may act as a mechanism, through which servant leaders



Journal of Managerial Psychology Vol. 33 No. 1, 2017 pp. 2-14 © Emerald Publishing Limited 0268-3946 DOI 10.1108/JMP-08-2016-0237 mitigate boredom among their followers. As proactive behaviors at work are embedded in the social context in which they are initiated (Spreitzer *et al.*, 2005), leaders can inspire and encourage such activities (Wrzesniewski and Dutton, 2001). Furthermore, the moderating role of team-level servant leadership on the relation between job crafting and job boredom is investigated.

A multilevel study on servant leadership

Theoretical background and hypotheses

Servant leadershib

Servant leadership is a leadership style that emphasizes on positive growth of followers (Greenleaf, 1977). According to van Dierendonck (2011), servant leaders empower and develop people as well as express humility, authenticity, and interpersonal acceptance. Servant leaders provide direction and take responsibility for the larger organization (van Dierendonck and Nuijten, 2011), while inspiring followers to give their best work performance by focusing on developing their potential (Van Dierendonck *et al.*, 2014). Studies have associated the servant leadership style with work engagement (Van Dierendonck and Nuijten, 2011), better life satisfaction, and less burnout among employees (Hakanen and Van Dierendonck, 2013) as well as employees' commitment to change (Kool and Van Dierendonck, 2012), trust in leadership (Joseph and Winston, 2005), organizational commitment (Bobbio *et al.*, 2012), and organizational citizenship behavior (Walumbwa *et al.*, 2010).

Empirical evidence exists on the distinctiveness of servant leadership from other leadership constructs, including transformational leadership. For example, studies suggest that while transformational leaders focus on building follower commitment to organizational goals (Bass and Steidlmeier, 1999), servant leaders operate through the satisfaction of their followers' needs, whereby the achievement of organizational objective is a subordinate and subsequent outcome (Van Dierendonck *et al.*, 2014; Parolini, *et al.*, 2009).

Whereas transformational leadership increases employee well-being among individuals who are less likely to take the initiative themselves (Breevaart *et al.*, 2016), we argue that servant leaders increase well-being by encouraging individuals to take initiative and craft their jobs. However, the purpose of this study is not to compare servant leadership with other leadership constructs, but rather to examine its role in enhancing employee well-being. As Liden and associates (2008) have suggested, servant leadership holds promise as a framework for understanding how leaders influence the attitudes and behaviors of the followers alongside other leadership perspectives. The present study aims to explore servant leadership as a contextual resource, which may mitigate job boredom via fostering job crafting.

Servant leadership and job boredom

Bored employees' capacities are not fully used (Harju and Hakanen, 2016). As a prevalent state boredom at work may lead to job dissatisfaction (Kass *et al.*, 2001), counterproductive work behaviors (Bruursema *et al.*, 2011), increased turnover and early retirement intentions, stress, and negative self-ratings of health and work ability (Harju *et al.*, 2014).

The present study builds upon Conservation of Resources (COR) theory, which posits that well-being is a function of various resources valued by the individual (Hobfoll, 1989). In the context of work, such resources can include those physical, psychological, social, or organizational aspects of the job that help employees to achieve their work goals, reduce the strain caused by work or foster employees' personal growth and development (Demerouti *et al.*, 2001). Congruently bored employees are perceived to lack stimulating job resources (e.g. autonomy and support) and challenges (Reijseger *et al.*, 2013).

COR theory distinguishes social relations, such as leadership, as a situational resource to the extent that they facilitate well-being by providing other resources (Hobfoll, 1989, p. 517).

Thus, if job boredom is produced by lacking autonomy, support and opportunities to use one's capabilities and grow professionally at work, then leaders who provide such resources should be able to mitigate boredom among their followers.

According to Liden and associates (2008) servant leaders help followers to grow and succeed in their careers by providing support and mentoring and by empowering followers to employ their unique strengths and capabilities in their work. Furthermore, they argue that servant leaders seek to understand the unique abilities, needs, desires and goals of their followers, and to ensure that they have the resources needed to achieve their potential.

Because of these pivotal characteristics servant leaders inspire and enable followers to achieve their goals and pursue their personal growth (Liden *et al.*, 2014). Thus, servant leaders may create a work environment, which is antithetical to that which is associated with boredom at work. Hence, we present the first hypothesis (see Figure 1):

H1. Team-level servant leadership T1 has a negative cross-level effect on job boredom T2.

Iob crafting as a mediator

Job crafting captures various strategies and activities that employees initiate to create more meaningful and motivating jobs for themselves (Wrzesniewski and Dutton, 2001). The current study follows the definition by Tims *et al.* (2012), which perceives job crafting as the changes employees make to better balance their job demands and job resources with their personal needs and abilities. This study focuses on expansive job crafting behaviors, which create more stimulating jobs and may therefore counteract boredom at work (van Hooff and van Hooft, 2014). Such behaviors include: increasing structural job resources (e.g. by seeking variety in tasks or improving one's own expertise or work processes); increasing social job resources (e.g. by seeking supervisor coaching, feedback or social support) and; increasing job challenges (e.g. by volunteering in new projects, taking on additional tasks or cognitively reframing one's work role; Tims *et al.*, 2012).

According to COR theory, individuals strive to accumulate resources to protect their well-being (Hobfoll, 1989, 2001). However, they need to perceive having some resources to begin with to engage in such behaviors. This means that to craft more resources in their jobs, employees require opportunities for doing so. For this reason, leader support may foster job crafting behaviors (Wrzesniewski and Dutton, 2001).

Moreover, as job crafting is essentially an activity through which individuals seek to shape more resourceful and challenging jobs to benefit themselves (Tims *et al.*, 2012; Wrzesniewski and Dutton, 2001), we argue that servant leadership style may be specifically

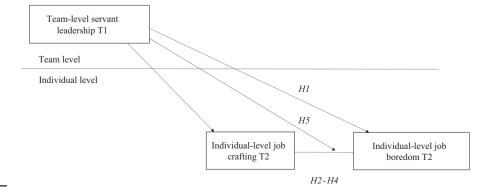


Figure 1. Theoretical model of the study

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suited for driving such behaviors, as it focuses primarily on the good of the individual instead of the organization. Hence, we suggest that job crafting is prominent in teams supervised by servant leaders and formulate:

H2. Team-level servant leadership T1 has a positive relation with job crafting T2.

Research on the effects of job crafting on well-being is accumulating. Previous research has found that job crafting fosters work engagement (Vogt *et al.*, 2016; Petrou *et al.*, 2012), and may mitigate the negative effects of high job demands on burnout and work engagement (Hakanen *et al.*, 2017). However, so far only two studies have focused on the relationship between job crafting and job boredom (Harju *et al.*, 2016; van Hooff and van Hooft, 2014) and found that the more the employees craft their jobs, the less boredom they experience.

Individuals may become bored if task demands do not match their capabilities; for instance, when their skills exceed the demands of the task (Csikszentmihalyi, 1975), or when demands are too high to be met (Acee *et al.*, 2010). Job crafting may counteract boredom at work by balancing individual capabilities with job demands, for example, by enhancing individual capabilities at work (e.g. autonomy, skills) or by increasing opportunities to use these capabilities (i.e. challenging job demands). A recent study shows that by crafting their jobs to better fit their abilities, employees enhance the meaningfulness of their work (Tims *et al.*, 2016), which is suggested to protect individuals from boredom (Barbalet, 1999). Hence, we propose:

H3. Job crafting T2 is negatively related to job boredom T2.

As previously mentioned, leaders may encourage employees to craft their jobs to better employ their capabilities and experience meaning at work (Wrzesniewski and Dutton, 2001). Following COR theory (Hobfoll, 1989, 2001), we argue that servant leadership may act as a contextual resource, which mitigates job boredom by enabling employees to increase their resources and derive:

H4. The effect of team-level servant leadership T1 on job boredom T2 is mediated by job crafting T2.

The cross-level moderating effects of servant leadership

The hypotheses *H1-H4* address the direct and mediated effects of team-level servant leadership T1 on job boredom T2. Although job crafting is initiated by employees, such behaviors can be either supported or hampered by leadership (Wrzesniewski and Dutton, 2001). For example, leaders may provide positive feedback or even reward employees for proactively crafting their jobs, or they can ignore or punish them for such behaviors. This means that when employees seek more challenges to better employ their capabilities at work, or when they initiate activities to learn new skills to better meet the demands of the job, they may find these activities more meaningful and stimulating if they are acknowledged and appreciated by the supervisor. In the present paper, we explore if the negative effect of job crafting on job boredom is stronger in teams with higher level of servant leadership and present our final hypothesis:

H5. Team-level servant leadership T1 moderates the relation between job crafting T2 and job boredom T2.

Method

Sample and procedure

The data used in this study were collected in two waves, in 2011 and 2014. The three-year time interval was set by practical arrangements and thus could not be influenced by the researchers.

The data consisted of 2,334 employees from 28 organizations, who returned the questionnaire at both times. As the focus of this study was to examine the team-level effects of servant leadership, we sampled teams of relatively small size (from 5 to 15 members), and of which at least 50 percent, or five members, had returned the questionnaire. In addition, to ensure that teams had remained intact, we omitted the respondents who had moved to another team during the study period. Finally, we discarded eight teams, in which the supervisor had changed during the study period.

The final sample consisted of 237 employees nested in 47 teams (i.e. on average, five members from each team returned the questionnaire at both times). This is considered as a typical sample of clusters in multilevel organizational research (Aguinis *et al.*, 2013). The employees worked in 15 organizations that operated in both the public and private sector, in areas such as research, health care, childcare, finance, IT, and administration services. Most of the respondents (70 percent) worked as professionals, clerks, and officials; 14 percent worked in sales and services; and 16 percent worked in other services such as maintenance or assistance. Mean age of the sample was 50 years (SD = 9.68 years) and 89 percent were female. The employees' educational background ranged from primary (12 percent) and secondary (20 percent) to tertiary (43 percent) and university education (25 percent).

Measures

Job boredom was measured using a one-dimensional scale (Dutch Boredom Scale; Reijseger $et\ al.$, 2013), including six items capturing the affective, cognitive, and behavioral manifestations of job boredom (e.g. "I feel bored at work"). Participants responded on a seven-point Likert scale ranging from 0 (never) to 6 (very often). The internal consistency reliabilities (Cronbach's α) of the scales are shown in Table I.

Job crafting was examined using a three-dimensional 15-item measure that described expansive job crafting behaviors, namely increasing structural job resources (e.g. "I try to learn new things at work"), increasing social job resources (e.g. "I ask others for feedback on my work performance"), and increasing challenging job demands (e.g. "If there are new developments, I am one of the first to learn about them and try them out"; Tims *et al.*, 2012). The items were scored on a five-point scale (1 = never to 5 = very often).

Servant leadership was assessed using six dimensions and 21 items from the Servant Leadership Survey measure (Van Dierendonck and Nuijten, 2011). Respondents were asked to rate their supervisors on: empowerment (e.g. "My manager helps me further develop myself."), accountability (e.g. "I am held accountable for my performance by my manager."), stewardship (e.g. "My manager has a long-term vision."), standing back (e.g. "My manager keeps himself/herself in the background and gives credit to others."), authenticity (e.g. "My manager is open about his/her limitations and weaknesses."), and humility (e.g. "My manager learns from the different views and opinions of others."). The items were scored on a six-point scale (1 = fully disagree to 6 = fully agree). Based on earlier research evidence on their association with job boredom (Harju *et al.*, 2014; see also Loukidou *et al.*, 2009), we used age, gender

Table I.Means, standard deviations,
Cronbach's α ,
intra-class correlations and inter-correlations of the study variables

| | Mean | SD | α | ICC | 1 | 2 | 3 |
|--------------------------|------|------|------|------|-------|-------|-------|
| 1. Job boredom T2 | 1.09 | 0.92 | 0.95 | 0.21 | | -0.27 | -0.18 |
| 2. Job crafting T2 | 3.15 | 0.53 | 0.91 | 0.25 | -0.68 | | 0.29 |
| 3. Servant leadership T1 | 4.26 | 0.80 | 0.95 | 0.39 | -0.54 | 0.82 | |

Notes: All descriptives and correlations were computed at the individual level. Within correlations of the variables are above the diagonal, between correlations of the variables are below the diagonal. All correlations are statistically significant at p-value < 0.01

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(0 = Female, 1 = Male) and education (0 = primary or secondary, 1 = tertiary or above) measured at T1 as control variables. Measure of job boredom T1 was also included in the analyses to control for its stability.

Preliminary analysis

A confirmatory factor analysis was conducted to assess the psychometric properties of the measures at the individual level of analysis. The measurement model consisted of three latent, correlated variables: job boredom (represented by its six items) and job crafting, (a second order factor represented by its sub-dimensions increasing structural resources. increasing social resources, and seeking challenges, which were each represented by their five respective items), which were measured at the same time point (T2) and servant leadership (a second order factor represented by 21 items loading on its six sub-dimensions) measured at T1. The model showed an acceptable fit with the data ($\chi^2 = 1387.660$, df = 807, b < 0.001; RMSEA = 0.06; CFI = 0.91; TLI = 0.90), but the modification indices suggested that the fit could be improved by allowing the error terms for the items "During work time I daydream" and "I tend to do other things during my work" to correlate because of their overlapping item content. The resulting measurement model fit the data slightly better $(\chi^2 = 1351.325, df = 806, p < 0.001; RMSEA = 0.05; CFI = 0.91; TLI = 0.91).One item ("I ask$ my co-workers for advice") had a weak loading on its latent factor representing "increasing social resources" with a coefficient of 0.30 (p < 0.05). All the other items loaded on their respective latent factors with coefficients ranging from 0.44 to 0.93. However, none of the items were discarded, as they were a part of validated measures. Based on these analyses a total score of all the measures was used.

The present paper examines servant leadership in a multilevel design to account for the lack of independence that occurs when multiple followers rate the same leader (Liden *et al.*, 2008). As we focus on perceptions of servant leadership that are shared among team members (Walumbwa *et al.*, 2010), an aggregate variable was created by averaging individual scores to a group mean for each team (Van Mierlo *et al.*, 2009).

To assess the appropriateness of aggregating individual scores to the team-level, we examined the extent to which individual ratings are attributable to group membership. First, reliability of a single assessment of the group mean for servant leadership was explored, which indicated that 39 percent (ICC1 = 0.39; see Table I) of the variance in servant leadership can be explained by the grouping effect (Bliese, 2000). Next, we assessed the reliability of the group mean (ICC2 = 0.73), which indicated that the mean rating of servant leadership was distinguishable between groups (i.e. 73 percent of the variance in judge's ratings was systematic; LeBreton and Senter, 2008). These estimates indicate a strong grouping effect (ICC1 > 0.25 and ICC2 > 0.70; LeBreton and Senter, 2008). We also calculated the within-group agreement (Rwg; James *et al.*, 1984) of the servant leadership measure to assess whether the team members were uniform in their leader ratings to the extent that the perception can be perceived as shared. As the within-group agreement ranged from 0.71 to 1.0 across teams, and thus reached the required minimum in each team, empirical justification for aggregating servant leadership to a group-level construct was provided (Rwg > 0.70; Le Breton *et al.*, 2003).

Strategy of analyses

Random coefficient analyses (Snijders and Bosker, 1999), MPlus software (Muthén and Muthén, 2012) and the robust maximum likelihood estimator were used to test the hypotheses. First, we tested the direct cross-level effect of team-level servant leadership T1 on job boredom T2 (*H1*). Second, we tested whether job crafting T2 mediated the effects of team-level servant leadership T1 on job boredom T2 (*H2-H4*). Lastly, we tested whether

team-level servant leadership T1 moderated the relation between job crafting T2 and job boredom T2 (H5).

We used both grand-mean and group-mean centering to address different hypotheses in this study (Enders and Tofighi, 2007, p. 127). As the primary focus of the *H1* was on the cross-level effect of a team-level predictor on an individual-level outcome, while controlling for its stability, we followed the recommendation by Enders and Tofighi (2007, p. 128) in grand mean centering both team- and individual-level variables for this analysis.

To test the hypotheses *H2-H4*, we specified a 2-1-1 model, which reflects the team-level nature of the independent variable (i.e. team-level servant leadership) and the individual-level nature of the mediator (i.e. job crafting) and the dependent variable (i.e. job boredom). Following the recommendations by Zhang *et al.* (2009), we used CWC(M) mediation analysis, in which the individual-level component of the mediator variable, which is specified at the within-level of analysis, is centered to the group mean while the team-level component of the mediator, which is specified at the between-level, is centered to the grand mean (see Figure 2 for the empirical model). This procedure provides unique estimates for the within and between-group coefficients of the mediator and thus avoids potential confounding of the estimates of the mediator's effects (see also Kehoe and Wright, 2013 for a similar procedure).

Because variance in the independent variable (i.e. servant leadership) exists solely at the team-level in a 2-1-1 model, the independent variable can account only for between-group variation in the mediator and the dependent variable (i.e. the extent to which team-level perception of servant leadership creates variation across teams in job boredom of individuals, through its relation on job crafting). However, it is still important to estimate the within-group effect of the mediator on the dependent variable to ensure precision of the overall model estimation (Zhang *et al.*, 2009). In other words, empirical support for the 2-1-1 model in the present study would indicate that the team-level component of job crafting T2 mediates the effects of team-level servant leadership T1 on the individual-level job boredom T2, even after the effect of the individual-level component of job crafting T2 is accounted for. Readers are referred to Zhang *et al.* (2009) for a detailed explanation of the CWC (M) approach and its advantages.

The final Hypothesis H5 in the present study focused on testing whether team-level servant leadership T1 moderates the relation between job crafting T2 and job boredom T2. Although group-mean centering individual-level independent variables is often done when examining cross-level interactions, it is not recommended if the primary aim is *not* to investigate whether deviation from the group mean affects the outcome (Aguinis *et al.*, 2013; Enders and Tofighi, 2007), as was the case in this study. Hence, the independent variables were centered to grand mean also for this analysis.

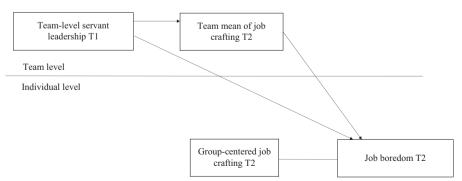


Figure 2. Empirical model of the study

Note: CWC (M)=centered within context with reintroduction of the subtracted means at Level 2

study on

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Results

Table I shows the means, standard deviations, Cronbach's α , intra-class correlations and inter-correlations of the study variables.

Direct and mediated cross-level relations between servant leadership and job boredom Table II shows the results of the analysis of the cross-level effect of team-level servant leadership on job boredom T2, while controlling for the stability of the dependent variable. Team-level servant leadership had a marginally significant negative effect on job boredom T2 ($\bar{y} = -0.22$, SE = 0.12, p = 0.05). Hence, support for H1 cannot be concluded.

Next, the CWC (M) mediation model (2-1-1 model) was tested. A relation between team-level servant leadership T1 and team mean of job crafting T2 ($\bar{y} = 0.38$, SE = 0.07, p < 0.001) was found lending support for H2 (Table II).

A negative relation with job boredom was found for both team mean of job crafting ($\bar{y} = -0.74$, SE = 0.25, p < 0.01) and group-centered job crafting ($\beta = -0.39$, SE = 0.13, p < 0.01). Hence, H3 was supported.

An indirect effect was found between team-level servant leadership T1 and job boredom T2 through team mean of job crafting T2 ($\bar{y} = -0.28$, SE=0.12, p < 0.05) supporting H4. As the mediator (job crafting) and outcome (job boredom) variable were measured at the same time point, we could not determine the direction of their relationship. However, when the indirect effect of team-level servant leadership on job crafting T2 via team mean of job boredom T2 was tested, no statistically significant effect was found ($\bar{y} = 0.07$, SE=0.04, p > 0.05). Taken together, the results indicate that the indirect effect of team-level servant leadership on job boredom, via job crafting, was more prominent than vice versa.

| Test of cross- | level direct Estimate | | ts (2-1 model) Lower and upper 95% CI limits | Test of cross-level media | ated effects Estimate | s (2-1- SE | 1 model) Lower and upper 95% CI limits |
|--------------------------------------|--------------------------|------|---|--|------------------------|---------------|---|
| | | | | | | | |
| Team-level servant | -0.22* | 0.12 | (-0.45, 0.00) | Team-level servant leadership T1 > job boredom T2 | 0.04 | 0.12 | (-0.19, 0.27) |
| leadership T1 > job boredom T2 | | | | Team-level servant leadership T1 > team mean of job crafting T2 | 0.38*** | 0.07 | (0.24, 0.51) |
| | | | | Team mean of job crafting T2 > job boredom T2 | -0.74** | 0.25 | (-1.23, -0.25) |
| | | | | Group-centered job crafting T2 > job boredom T2 | -0.39** | 0.13 | (-0.64, -0.13) |
| | | | | Team-level servant leadership $T1 >$ team mean of job crafting $T2 >$ job boredom $T2$ | -0.28* | 0.12 | (-0.51, -0.04) |
| Control variab | les -0.02** | 0.01 | (0.02 0.01) | Amo | 0.09*** | 0.01 | (0.02 0.01) |
| Age | -0.02 | 0.01 | (-0.03, -0.01) | Age | -0.02 | 0.01 | (-0.03, -0.01) |

| Age | -0.02** | 0.01 | (-0.03, -0.01) | Age | -0.02*** | 0.01 | (-0.03, -0.01) |
|-------------|---------|------|----------------|----------------|----------|------|----------------|
| Gender | 0.48** | 0.15 | (0.18, 0.77) | Gender | 0.44*** | 0.13 | (0.19, 0.69) |
| Education | -0.17* | 0.08 | (-0.33, -0.01) | Education | -0.10 | 0.09 | (-0.28, 0.08) |
| Job boredom | 0.57*** | 0.06 | (0.46, 0.69) | Job boredom T1 | 0.54*** | 0.05 | (0.44, 0.65) |
| T1 | | | | | | | |

Notes: Unstandardized estimates are reported. Gender refers to 0 = women 1 = male; education refers to 0 = first or second level degree 1 = tertiary or university degree. * $p \le 0.05$; *** $p \le 0.01$; **** $p \le 0.001$

Table II.
Test of cross-level direct and mediated effects of team-level servant leadership on job boredom

Cross-level moderating effect of team-level servant leadership

Lastly, cross-level moderation effect of team-level servant leadership on the relation between job crafting T2 and job boredom T2 was examined. No statistically significant variance was detected in the slope coefficient ($\bar{y}=-0.04$, SE=0.05, p>0.05). The results imply that the relation between job crafting T2 and job boredom T2 does not vary across teams. Thus, it was expected that no cross-level moderation effect of team-level servant leadership was found ($\bar{y}=0.25$, SE=0.19, p>0.05), as there was practically no variance across teams to be explained by a team-level factor (Aguinis *et al.*, 2013). Hence, Hypothesis *H5* was not supported.

Discussion

No support was found for the negative cross-level effect of team-level servant leadership T1 on job boredom T2 (H1 was not supported). However, job crafting T2 mediated the effect of team-level servant leadership T1 on job boredom T2 (support for hypotheses H2-H4). Finally, a cross-level moderating effect was not found of team-level servant leadership T1 on the relation between job crafting T2 and job boredom T2 (H5 was not supported).

Servant leadership may prevent job boredom by enhancing job crafting

Our most important finding was that job crafting mediated the cross-level effect of team-level servant leadership on job boredom three years later. Thus, our study supports the notion that for employees to be willing and able to craft their jobs, leaders should nurture such behaviors (Wrzesniewski and Dutton, 2001). Servant leaders may provide employees with the tools to create a sense of meaning in their work themselves. In this vein, job crafting and servant leadership may complement each other in promoting employee well-being; i.e. diminishing job boredom.

The direct effect of team-level servant leadership on job boredom was marginally statistically significant. Although with a larger sample the estimate could have fallen well within the confidence interval (Cumming and Finch, 2001), it may also be that long-term effects of leadership on job boredom may be difficult to detect, as the construct is found to remain relatively stable over time (Harju *et al.*, 2016). Moreover, the effect of job crafting on job boredom was not found to vary across teams, which means that team membership and team-level factors (i.e. servant leadership) may not yield a significant impact on the way individuals' job crafting predict their job boredom.

The current study implies that servant leadership may cultivate a team environment in which employees are active in crafting more inspiring jobs for themselves. As employees may vary in terms of what motivates and inspires them in their jobs (Wrzesniewski *et al.*, 1997), by allowing followers to fully realize their own potentials, servant leaders can cater for the needs of a diverse workforce. Hence, servant leadership may contribute to employee well-being by empowering them to craft their jobs.

Limitations and suggestions for further research

This study has limitations that warrant addressing. First, it relies on employees' self-reports, which makes the scores susceptible to biased estimates (Podsakoff *et al.*, 2003). However, the long time between measurements ameliorates this potential bias (Doty and Glick, 1998). Furthermore, this study examined job boredom, which is a subjective psychological state. The measure of job crafting might allow for peer or supervisor ratings to some extent, but even then, detecting the various ways of crafting might be difficult, if not impossible, for another rater.

Second, the relatively long time between measurements (three years) may have diluted the relationship between the variables. Very few studies exist on appropriate time scales for assessing effects in organizational research (Mitchell and James, 2001; Zaheer *et al.*, 1999).

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In future studies, it would be valuable to use "shortitudinal designs" to find the optimal time lag to detect causal effects (Dormann and Griffin, 2015).

Third, the number of Level 2 units (i.e. 47 teams) was small for detecting both slope variance across Level 2 units and cross-level interaction effects, which is a common problem in studies assessing cross-level interactions (Mathieu *et al.*, 2012; Scherbaum and Ferreter, 2009; Maas and Hox, 2005). Thus, it may be that our results are subject to Type 2 error. Further studies should examine these relations with larger sample sizes on both Level 2 and Level 1.

Fourth, this study focused on the correlational relation between job crafting and job boredom, which does not allow for causal interpretations. However, job crafting may often serve a short-term need, such as carrying out a work process in a different way or seeking feedback from a specific task (Tims *et al.*, 2012), which may not carry lasting effects. Future studies should investigate whether job crafting can have long-term effects on employee well-being.

Theoretical and practical implications

The present study provides evidence on the importance of accounting for contextual factors of the organization when studying individual-level phenomena such as job boredom and job crafting. Thus, studies on employee behaviors and associated well-being should consider the contextual effects of team membership, and the factors that are shared by team members, notably leadership. This study found a link between team-level servant leadership and job boredom via job crafting, and thus extends the theory on servant leadership by highlighting its potential in encouraging followers to proactively foster their motivation and well-being.

On a practical note, this study implies that cultivating servant leadership at workplaces may prevent job boredom by fostering job crafting. For example, taking on new challenges may be daunting to employees as they might be uncertain of the outcome. By conveying the interpersonal trust and acceptance of potential failure, which characterizes servant leadership (Van Dierendonck, 2011), challenging oneself may become less threatening for employees. In addition, servant leaders may motivate employees to seek ways to fully employ their capabilities and work to the best of their abilities, by making sure they know what is expected of them and by making them accountable for their work performance (Van Dierendonck and Nuijten, 2011).

In sum, although the determinants of employee well-being may vary across individuals, leadership should not be overlooked when aiming to create more motivating and less boring jobs. As a leadership style that focuses on developing individuals' strengths and capabilities, servant leadership may be an asset for organizations that need their employees to adapt in a constantly changing work environment. Sustaining an environment in which employees continuously take responsibility for their own work and well-being might yield accumulating benefits.

Conclusions

Little is known of the contextual factors of job boredom and job crafting, such as the role of leadership. The current study sheds light on the role of servant leadership in mitigating boredom by fostering job crafting in teams. The findings suggest that servant leadership may encourage teams to create a more stimulating work environment. All in all, our study supports the notion of servant leadership as an enabler of employee well-being.

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