A Burnout Model of Job Crafting: Multiple Mediator Effects on Job Performance

SHORT TITLE

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Abstract
Studies establish that job crafting, i.e. the proactive changes made in one’s work through balancing available job demands and resources, results in various positive outcomes at the individual, job, and organizational levels. This study examines how employees proactively craft their jobs to avoid stress and burnout and become better performers. We ground our study in the occupational health context of knowledge workers. Structural equation models on data from 268 IT management professionals indeed demonstrate the coping effect of job crafting in decreasing role stress and burnout, and increasing one’s psychological availability, along-with multiple mediation effects in improving job performance.

Keywords: job crafting, psychological availability, burnout, stress, performance, knowledge workers
Summary

Studies have established that employee job crafting, i.e. the proactive changes made in one’s work through balancing available job demands and resources, results in various positive outcomes at the individual, job, and organizational levels. Drawing on perspectives from the JD-R and COR theories, our model of proactive job crafting sheds light on the mechanisms through which job crafting influences employee job performance. Further, recent burnout literature advocates the investigation of more anticipatory or proactive coping mechanisms that reduce the effects of negative conditions as well as facilitate positive outcomes. Also, there is an increasing emphasis on including individual resources in explaining stress and burnout. Given the individual resourcefulness in undertaking change initiatives, we position job crafting as a proactive coping mechanism which is also instrumental in reducing negative or detrimental outcomes. In cognizance of the rising levels of stress and strain in today’s work life, we examine how employees proactively craft their jobs to avoid stress and burnout and become better performers. We ground our study in the under-researched occupational health context of knowledge workers, increasingly being recognized to suffer from high levels of job demands and pressures. Structural equation models on survey data from 268 IT management professionals indeed demonstrate the proactive coping effect of job crafting in decreasing role stress and burnout, and increasing psychological availability, through multiple mediation effects in improving job performance. In the light of employees influencing their own job characteristics through proactive efforts of job crafting, this study suggests the practical importance of focusing on individual perspectives when considering performance outcomes.
Introduction

Burnout is an occupational hazard that continues to draw immense attention as it relates to significant costs for employees and organizations (e.g. Bakker, Demerouti & Verbeke, 2014; Schaufeli, Bakker & VanRhenen, 2009). It has become a major problem in most countries, not only in the lowest socioeconomic groups, but at all societal levels (Albertsen et al., 2010). Majority of the burnout studies exist in the context of psychosocial professions of physicians, nurses and teachers. However, burnout may pertain to any occupation where there is an imbalance between demands and possible renewal of resources (Bakker & Demerouti, 2014). Such aspects are evident in many careers within fast-paced firms, where work is varied, complex, deadline driven and competitive, with long workdays, and where it is difficult to separate work from home life (Hetland, Sandal & Johnsen, 2007). This study is based on data from knowledge workers belonging to the IT services, which typically carries all of these characteristics. Knowledge work, often characterized by a ‘boundaryless’ work environment stresses the potential endless demands and performance pressures in these kinds of jobs that lead to stress and burnout (Benson & Brown, 2007; Lee, Blackman & Hurst, 2007).

The way people cope with burnout is very important to determine its impact (Chen & Cunradi, 2008). Consequently, the relationship between burnout and coping has been the focus of major research over the past few decades (Angelo & Chambel, 2014; Van Rhenen, Schaufeli, Van Dijk, & Blonk, 2008). Traditionally, the burnout literature has considered coping as a reactive mechanism in diminishing distress (Schwarzer & Knoll, 2003). However, the conceptualization of coping has changed in the context of the positive psychology movement (Peiró, 2007) to include proactive coping that involves a confirmatory and positive approach to dealing with burnout (Greenglass, 2002). Hence, several researchers have proposed a change in emphasis, investigating whether coping strategies are associated with decreased distress, as well as higher levels of positive outcomes (Angelo & Chambel,
2014; Crant, 2000). Such emphasis is reflected in the concept of job crafting, which constitutes self-driven work related changes through a proactive balance of job demands and job resources (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). The conservation of resources (COR) theory (Hobfoll, 1988, 2001, 2002) and the job demands-resources (JD-R) model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) also suggest that resources play a dual role in enhancing positive and reducing negative outcomes. Hence, given the individual level resourcefulness, job crafting can play an effective role as a proactive coping mechanism in decreasing negative or detrimental outcomes as well as increasing positive outcomes.

The goal of this study was to examine the role of job crafting as a proactive coping mechanism in reducing stress and burnout, and also increasing psychological availability or resourcefulness of individuals. We also examine the extent to which proactive coping through job crafting explains job performance through multiple mediating effects of role stress, burnout and psychological availability.

This study contributes in the following ways. First, it contributes to the burnout literature by positioning job crafting as a proactive coping strategy. Second, it contributes to role stress literature by suggesting the effectiveness of job crafting in reducing role stress. Third, following the concept of resource caravans in COR theory, this study also suggests that job crafting results in higher individual resourcefulness or psychological availability at work. Finally, based in the context of knowledge workers, this study underlines the important role of job crafting in proactively coping with their stress and burnout, while enhancing their psychological availability and job performance, as evident through multiple mediation effects.

**Job Crafting**

Based on social constructionism (Gergen, 1994), Wrzesniewski and Dutton (2001) define job crafting as "the physical and cognitive changes individuals make in the task or relational
boundaries of their work” (p. 179). From a working environment perspective, in job crafting, employees independently modify aspects of their jobs to improve the fit between the characteristics of the job and their own needs, abilities, and preferences (Tims, Bakker & Derks, 2013; Berg, Dutton, & Wrzesniewski, 2008). Because job crafting involves initiating changes in one’s job design, it is operationalized according to the types of job characteristics suggested in the JD-R model (Demerouti et al., 2001): job demands and job resources. Job characteristics that require sustained effort from employees and are, therefore, associated with certain costs are labelled job demands. Job characteristics that contribute toward achieving work related goals, reducing the effect of job demands and associated costs, and stimulating personal development are called job resources (Bakker et al., 2007). Hence, individual job crafting constitutes increasing structural job resources (e.g., requesting more autonomy), increasing social job resources (e.g., asking for feedback), increasing challenging job demands (i.e., start new projects), and decreasing hindering job demands (i.e., cognitive and emotional demands (Tims et al., 2012, 2013).

Existing research has identified various antecedents to job crafting, such as individual characteristics (e.g. Bakker et al., 2012), attitudes (Tims et al. 2014), job characteristics (e.g. Lyons, 2008), job demands (e.g. Petrou et al., 2012,), person-job fit (Tims, Derks & Bakker, 2016), as well as factors at the collegial (e.g. Arts et al., 2012) and supervisory/leader level (e.g. Ghitulescu 2006). Another set of studies show that job crafting results in various proximal outcomes such as positive feelings and attitudes (e.g. Ko, 2011), social relatedness (Slemp & Vella-Brodrick, 2014) and work engagement (e.g. Demerouti et al., 2015), that further lead to positive outcomes of wellbeing and performance at work (e.g. Leana et al., 2009) as well as career success (e.g. Akkerman & Tims, 2016 and Plomp et al., 2016).

However, overall there is a dearth of studies that have focused on examining how job crafting is resourceful in increasing individual wellbeing, example, psychological availability at work.
To be psychologically available at work is significant from the perspective of task completion as well as handling work related pressures. And certainly there is a need for studies that engage into understanding the dynamics of how job crafting is resourceful in both, increasing individual resources as well as decreasing individual level demands.

Conservation of resources theory is one of the leading resource theories and compliments the JD-R theory in explaining job stress and burnout (e.g. Gorgievski, Halbesleben & Bakker, 2011; Halbesleben & Buckley, 2004). It defines resources as “those entities that either are centrally valued in their own right, or act as means to obtain centrally valued ends” (Hobfoll, 2002, p. 307). According to COR theory, people work to obtain resources that they do not have, retain those resources that they possess, protect resources when threatened, and foster resources by positioning themselves so that their resources can be put to best use (Angelo & Chambel, 2014; Gorgievski & Hobfoll, 2008). There are two main assumptions in the COR theory (Xanthopoulou et al., 2007): First, individuals invest their resources in order to deal with threatening situations and prevent negative outcomes; second, individuals strive not only to protect their resources, but also to accumulate them (Hobfoll, 1989). Further, since initial gain begets further gain, individuals possessing strong resource pools experience spirals of resource gain and that resource surplus promote positive outcomes (Hobfoll, 2001).

The COR theory emphasizes the importance of resources in avoiding burnout. According to it, people should not engage in reactive coping but rather act in a proactive way that will help them gain resources and become less vulnerable to the threat of future or actual resource loss (Westman et al., 2005). Job crafting is representative of such proactiveness, since it does not necessitate any negative appraisals, such as loss, and reflects efforts to build up resources (Schwarzer & Knoll, 2003). Job crafting is characteristically similar to anticipatory coping (e.g. Angelo & Chambel, 2014) because it involves the assessment of
future demands and resources opportunities not as threats, but as personal challenges, through taking initiatives to increase challenges in job.

**Mediation of role stress between job crafting and job performance**

According to role theory, employees with client facing roles experience role stress by virtue of the position they occupy as organizational boundary-spanners (Kahn & Byosiere, 1992). Occupational role stress emerges as individuals experience conflict, ambiguity or overload in work-related roles (Travis, Lizano & Barak, 2015). The need for flexibility in addressing unique needs, as well as interactions within a large role set, results in feelings of stress among employees (Rizzo, House & Lurtzman, 1970). Devi and Sharma (2013) advocate for a customised and individual approach to managing role stress at work. The COR theory posits that individuals invest in resources in order to protect themselves from potential negative work conditions. The JD-R model also suggests that job resources are critical in mitigating detrimental outcomes, such as stress and burnout. Hence, job crafting should be instrumental in reducing role stress through proactive initiatives taken to increase one’s resources and flexibility at work. For instance, employees may improve their job design features by revising their work methods and schedules to fulfil job demands. Further, the individual resourcefulness through job crafting also enables employees to perform more tasks or more complex tasks, thus improving their performance levels (Bakker, Demerouti & Verbeke, 2014; Tims, Bakker & Derks, 2014). Hence, it is likely that one of the mechanisms through which job crafting results in improved performance is by playing a proactive role in coping with stress. Accordingly, we hypothesize that,

*Hypothesis 1a: Job crafting will be negatively related to role stress.*

*Hypothesis 1b: Role stress will mediate the relationship between job crafting and job performance.*

Insert Figure 1 about here
Mediation of burnout between job crafting and job performance

Burnout is a negative affective state occurring due to recurring distress, conceptualized as a depletion of an individual’s energetic coping resources (Kristenson et al., 2005; Maslach, Schaufeli & Leiter, 2001; Pines & Keinen, 2005; Shrirom, 2005). High levels of burnout signify insufficient resources for employees to effectively deal with their job demands (Gorgievski & Hobfoll, 2008). From this notion, it follows that accumulation of individual resources will reduce experiences of burnout. From the perspective of COR theory, individuals actively invest in resources for protection against situational demands or negative experiences (Hobfoll, 2002). Hence, the individual resourcefulness of job crafting will decrease burnout through the coping mechanism of balancing job demands and resources.

Further, the JD-R model also states the significant role of job resources in negating the effects of burnout, which in turn results in positive work outcomes (Bakker & Demerouti, 2007, 2014; Taris, 2006). Resourceful and proactive employees are likely to avoid or reduce burnout and avoid deterioration in their performance levels. Recent evidences also indicate that job crafting improves task performance through reducing exhaustion of employees (Demerouti et al., 2015; Petrou et al., 2015). Studies, example that of Chauhan (2009) and Azeem (2010) emphasize on the provision of necessary tools and mechanisms that can enable individuals to effectively handle workplace demands towards curbing stress and burnout.

Therefore, job crafting will be instrumental in improving job performance by proactively coping with burnout. Accordingly, we hypothesize that,

\textit{Hypothesis 2a: Job crafting will be negatively related to burnout.}

\textit{Hypothesis 2b: Burnout will mediate the relationship between job crafting and job performance.}

Mediation of psychological availability between job crafting and job performance
Psychological availability is the “sense of having physical, emotional, or psychological resources to personally engage at a particular moment” (Kahn, 1990). In essence, it assesses the readiness or confidence of a person to engage in tasks (May, Gilson & Harter, 2004). According to COR theory, individuals are likely to invest in resources that further result in accumulation of resources, thus forming resource caravans (Hobfoll, 2001, 2002). Hence, the initiatives to increase resources through job crafting will result in improved psychological conditions or resources such as psychological availability. Further, psychologically available persons will have higher emotional, physical, and cognitive resources that will boost work outcomes (Kahn, 1990). The JD-R model also states that increase in resources, example, through job crafting, play a motivational role in further promoting positive work outcomes, including performance. Accordingly, we hypothesize that,

**Hypothesis 3a:** Job crafting will be positively related to psychological availability

**Hypothesis 3b:** Psychological availability will mediate the relationship between job crafting and job performance.

Thus, our burnout model of job crafting in Figure 1 presents employee initiated job crafting as a proactive coping mechanism in dealing with stress and burnout, while improving positive individual and job outcomes. Specifically, the model tests the dual effect of job crafting in decreasing role stress and burnout, while increasing psychological availability of individuals. Further, the model explains the performance effect of job crafting by examining multiple mediation influences on the relationship of job crafting and job performance, through burnout, role stress and psychological availability.

**Method**

**Context, Participants and Procedures**

Drucker (1999) emphasizes that knowledge workers’ productivity is the great challenge of this century and identifies it as the true competitive edge of a global economy. Given, that
there are multiple views on defining a knowledge worker (Albertsen et al., 2010), for the purpose of this study we consider knowledge worker as: “any employee who is involved in consultancy based on their specialist knowledge or know-how, or research and development work for new products, services or processes; and required to gather, analyse, add value and communicate information to empower decision making” (Roy et al., 2001, p. 1; Lee, Blackman & Hurst, 2007). Though professionals experience various kinds of stress, which lead to job dissatisfaction, burnout and turnover (Phelan et al., 1991), however, there is dearth of studies that have considered these issues in the context of consulting professionals. To the best of our knowledge there is no evidence yet on the occupational health issues on the group of management consultants. Particularly, we ground our study in the context of IT management consultancy services. This is for three reasons: First, existing literature highlights the significant demands that exist for consultants where long work hours and a frantic work pace are often a central part of daily work life (Merilainen et al., 2004). Recent analyses of the work roles consultants perform have stressed extensive variety of work tasks, the variations in the nature of the expertise employed (varying from esoteric to more technical knowledge), differing boundary relationships with clients (transactional to relationship-based) (Kitay & Wright, 2007), as well as diverse client needs and political positions (Alvesson & Johansson, 2002). Second, scholars have indicated that professionals or project-based workers might particularly benefit from crafting their jobs, as these employees usually have more autonomy and higher career aspirations as well as are increasingly subjected to excessive job demands that may require crafting efforts (Parker, 2014). Third, IT services are a growing business domain and also characteristic of high attrition and performance pressures, especially in client facing or advisory roles (Hetland et al., 2007).
This study reports the results of the second phase of a larger study (Singh & Singh 2016, Singh et al. 2016). In the first phase, we designed a qualitative daily diary study and a series of in-depth interviews to develop a greater contextual understanding of job crafting and guide further study design (e.g. the reason we include psychological availability, stress and burnout in the current research model). The study was undertaken in two organizations (1000-2000 employees) operating in the management consultancy sector (specializing in information technology services), and located in the National Capital Region of India. We contacted the potential respondents in the organizations through their respective HR heads, and explained the purpose of our study along with assurances of confidentiality to the volunteering participants regarding exclusive data access rights of the research team. First, participants were provided with the questionnaire along with instructions and a return envelope. Next, at a later stage, responses for job performance and psychological availability were taken from peers of respondents (e.g. Grandey, 2003). Our choice was guided by the notion that more often than not, supervisors or managers have lesser opportunity to directly observe the behavior of employees, while, peers or co-workers being more close to the employees are more observant of their behaviors at work (Penny and Spector, 2005).

In the first phase, responses were elicited from employees (consultants) for questions related to job crafting, role stress and burnout. In the next phase, responses for psychological availability and performance was taken from peers of employees (consultants from the first phase). In the first phase, we had sent out a total of 500 questionnaires to employees (consultants), and 297 were sent back, reaching a response rate of 59.40 percent. Of this, 268 responses were usable on account of incomplete questionnaires and data cleaning (we excluded nine cases where the missing values were greater than five percent, and we also had to further exclude another 21 cases due to incomplete matched responses between respondent and peer ratings). Consistent with the general distribution of gender within the organizations
in context, most of the participants are male (73.64%). The mean age of employees is 29 years (SD = 2.9). Of the respondents, 16.79% are graduates, 52.23% are post-graduates, and 30.97% have additional qualifications after post-graduation. The mean total experience and tenure for the respondents in the current organizations is 4.34 years (SD = 2.25) and 2.13 years (SD = 0.93), respectively.

**Measures**

*Job crafting* was assessed with a 21 item scale developed by Tims, Bakker & Derks (2012), that constitutes - ‘increasing structural job resources’ (e.g. ‘I try to develop myself professionally’; α = .93); ‘increasing social job resources’ (e.g. ‘I ask others for feedback on my job performance’; α = .96); ‘increasing challenging job demands’ (e.g. ‘When an interesting project comes along, I offer myself proactively as project co-worker’; α = .87), and decreasing hindering demands (e.g., “Last month, I organized my work such that I did not have to concentrate for too long a period at once”; α = .94). All the items were rated on a five point Likert scale ranging from 1= ‘seldom’ to 5= ‘always’. A confirmatory factor analysis reveals that the hypothesized correlated four-factor structure fits well with the data ($\chi^2$/df = 2.01, SRMR = .05, RMSEA = .06, TLI = .94, CFI = .94).

*Burnout* was measured by the work-related burnout dimension of the Copenhagen Burnout Inventory (Kristensen et al., 2005), defined as “The degree of physical and psychological fatigue and exhaustion that is perceived by the person as related to his/her work”. It has seven items that were rated on a five point Likert scale. The first three questions are measured ranging from 1= “to a very low degree” to 5= “to a very high degree”, example “Is your work emotionally exhausting?” while, the last four questions range from 1= ‘Always’ to 5= ‘Never’, example “Do you feel worn out at the end of the working day?” (α = .89). A confirmatory factor analysis reveal that the hypothesized one-factor structure fits well with the data ($\chi^2$/df = 2.16, SRMR = .04, RMSEA = .05, TLI = .96, CFI = .96).
Role stress constituting role ambiguity, conflict and overload was measured using the Rizzo, House, and Lirtzman instrument (1970). Role ambiguity has five items, e.g. “I do not feel certain about how much authority I have” (α = .92); Role conflict has six items, example “I have to do things that should be done differently” (α = .92) and Role overload has four items, e.g. “I just can’t find the energy in me to do all the things expected of me” (α = .85). All the items were rated on a five point Likert scale ranging from 1 (“not agree at all”) to 5 (“very strongly agree”). A confirmatory factor analysis reveal that the hypothesized correlated three-factor structure fits well with the data ($\chi^2$/df = 2.41, SRMR = .06, RMSEA = .07, TLI = .93, CFI = .93).

Psychological availability was assessed using peer ratings with five items developed by May, Gilson & Harter (2004). Respondent’s peer responded to items including, ‘Does he/she display confidence in the ability to display appropriate emotions at work.” (α = .91). All the items were rated on a five point Likert scale ranging from 1 ‘Seldom/Never’ to 5= ‘Always’. A confirmatory factor analysis reveal that the hypothesized one-factor structure fits well with the data ($\chi^2$/df = 1.36, SRMR = .05, RMSEA = .06, TLI = .96, CFI = .96).

Job performance was assessed using peer-ratings on a five point Likert type scale, ranging from 1= “needs much improvement” to 5= “excellent”, example “How would you rate him/her in terms of client satisfaction provided?” The construct is measured with four items developed especially in the context of project-based professionals by Welbourne, Johnson & Erez (1998) (α = .89). A confirmatory factor analysis reveal that the hypothesized one-factor structure fits well with the data ($\chi^2$/df = 2.39, SRMR = .05, RMSEA = .07, TLI = .95, CFI = .96). The scores for the scales were obtained by individually adding and dividing each result, high scores on each scale indicating higher measured concept. All the item loadings for each of the constructs were significant and above the acceptable .70 level. The
Cronbach’s alpha values were analysed for the final structures of each instrument, with acceptable values of above .75.

**Analytical strategy**

Structural equation modelling was used for dealing with multi-item latent variables and mediation paths for testing hypotheses. All analyses were conducted in AMOS 20 Basic program. The covariance matrix was analyzed using the maximum likelihood estimation method (Arbuckle, 2005). To test the fit of our model to the data, the traditional chi-square ratio to its degree of freedom (should be < 3) was assessed. However, the critical value of chi-square is sensitive to large sample sizes and easily produces a statistically significant result, and in fact were significant across our analysis (e.g. in Consiglio, Borgogni, Alessandri & Schaufeli, 2013). Hence, as widely recommended the goodness of fit measures, e.g. the standardized root mean square residual (SRMR); and parsimony adjusted measures, like the root mean square error of approximation (RMSEA) were also assessed (Hoyle, 1995). As a rule of thumb, SRMR and RMSEA <.05 indicate excellent fit while < .08 indicate a reasonable fit of the model to the data (Browne and Cudeck, 1993). As recommended by Marsh et al. (1996), we also assessed the base line comparisons using the Tucker-Lewis Index (TLI) and the comparative fit index (CFI). These values should meet the minimum criterion of .90 to suggest a good model fit to the data. For testing mediation, the bootstrap procedure of AMOS was used to obtain 95% non-biased confidence intervals around the parameter estimates using 1000 bootstrap runs. Bootstrapping is considered a powerful resampling method when the variables are not normally distributed (MacKinnon, 2008). The null hypothesis that x has no indirect effect on y via m is rejected when the confidence interval lies above or below zero (Preacher, Rucker & Hayes, 2007).

**Results**

**Descriptive Statistics**
Table 1 presents the means, standard deviations, and zero-order correlations for the latent variables. Most of the mean values were above the value of 3.00 on the Likert scale. Correlations values between most of the variables had an acceptable magnitude. The correlations between the job crafting dimensions had the expected relations, with all of them being positive and significant. As expected, job crafting was significantly and positively related to psychological availability and performance, indicating higher psychological availability and higher performance among employees crafting their jobs. Also, job crafting significantly and negatively related to role stress and burnout, suggesting lower stress and burnout among job crafters. Similarly, the dimensions of role stress were significantly and positively related. Role stress was positively related to burnout and negatively related to psychological availability. As expected, burnout also negatively related to job performance. As for the non-significant correlations, the lack of correlation does not disprove possibility of causality, as advocated by Bollen (1989).

Measurement model
We followed the two-step approach given by Anderson and Gerbing (1988): the first step involves examining the convergent and discriminant validity of the measurement model using confirmatory factor analysis and the second step requires testing of the structural model. 

Convergent Validity and Reliability. Table 1 shows Cronbach’s alpha, construct reliability, and average variance extracted (AVE) of the latent variables. All the values are above the desired cut-off of .70 value in case of Cronbach’s alpha (ranging between .85 to .96) as well as composite construct reliability (ranging between .86 and .96), and .50 cut-off value in the case of average variance extracted, ranging between .55 to .82 (Fornell & Larcker, 1981).
addition, each indicator’s estimated coefficient on its underlying latent factor is significant at 
\( p < .001 \) (Anderson & Gerbing, 1988).

**Discriminant Validity.** All squared correlations of first-order latent variables are less than 
AVE as desired, varying within the difference range of .13 to 1.22 (Fornell & Larcker, 1981). 
Similarly, the values of MSV (maximum shared variance) and ASV (average shared 
variance) are less than AVE for all the constructs, as required, indicating that the items share 
more common variance with their respective constructs. Also, factor score weights are high 
for their own constructs and low for other constructs, clearly establishing the discriminant 
validities (e.g. in Singh & Sarkar, 2012).

**Common Method Variance & Alternate Models.** Gathering perceptual data increases the risk 
of common method bias. To mitigate the effects of such bias, we followed the steps as 
recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). First, peer ratings were 
used to measure job performance, thus separating the source of the predictor data from the 
outcome data. Second, we also conducted Harman’s test for common method bias using 
orthogonal rotation and find our ten-factor model has better fit (74% variance) with the data 
compared to the alternative one-factor model (23% variance). Third, we tested alternate 
models by running a two-factor confirmatory analysis (job crafting, and all others as a single 
factor). The fit indices of the resulting model were not good \( (\chi^2/df = 3.15, \text{RMSEA} = .09, \text{SRMR} = .12, \text{TLI} = .68, \text{CFI} = .72) \), indicating that respondents could differentiate the 
constructs, thus implying that the results should not be affected by common method variance. 
We further compared the eleven-factor model to an alternative four-factor model, which 
included job crafting as a single factor, the three mediator variables (burnout, psychological 
availability, role stress) as a single factor, and job performance as a separate factor \( (\chi^2/df 
= 2.86, \text{RMSEA} = .08, \text{SRMR} = .09, \text{TLI} = .81, \text{CFI} = .87) \). The four-factor and one-factor 
model clearly show a poorer fit to the data with lower values of fit indexes. Overall, the
indices for the proposed measurement model indicate acceptable fit ($\chi^2/df = 1.85$, RMSEA = .06, SRMR = .06, TLI = .92, CFI = .92). Therefore, we used the proposed measurement model to examine the theoretical structural model.

**Structural model**

In the structural model, apart from the hypothesized relationships, we also included all plausible paths in order to account for possible theoretical relationships in view of model completeness. The structural model showed a good fit to the data ($\chi^2/df = 1.85$, SRMR = .06, RMSEA = .06, TLI = .92, CFI = .92) and explained variance of 26% in role stress, 32% in burnout, 23% in psychological availability and 21% in job performance. The estimates of the direct and indirect effects were based on 1000 bootstrap samples with 95% confidence interval (MacKinnon, 2008). The standardized direct effects of job crafting on psychological availability ($\beta = .40$, $p < .01$) is significant and positive (supporting Hypothesis 3a), while on burnout ($\beta = -.58$, $p < .001$) and role stress ($\beta = -.48$, $p < .001$) they are significant and negative (supporting Hypothesis 2a, 1a). Furthermore, psychological availability ($\beta = .23$, $p < .001$) related positively with job performance, and burnout ($\beta = -.23$, $p < .01$) related negatively to job performance, while role stress was somewhat weakly related to job performance ($\beta = .18$, $p < .05$). In addition, though weakly significant, results also reveal a negative relationship between role stress and psychological availability ($\beta = -.13.9$, $p < .10$).

We tested the mediating effect of burnout between job crafting and job performance, and find significant results ($\beta = .13$, $p < .01$), with the bias-corrected confidence interval (B-CCI) ranging from -.28 to -.06 (as confidence interval does not contain 0), thus supporting Hypothesis 2b. Second, the mediating effect of role stress between job crafting and job performance, was comparatively weak ($\beta = .09$, $-.23 \leq \text{B-CCI} \leq -.05$, $p < .05$). The results of
the third and final bootstrap analysis showed that the mediating effect of psychological availability between job crafting and job performance, was also significant ($\beta = .09, .03 \leq B-CCI \leq .20, p < .01$), thus supporting Hypothesis 3b. The comparative results for mediation significance using the percentile bootstrap method (Fritz, Taylor & MacKinnon, 2012) also revealed similar results.

**Discussion**

Stress and burnout is an increasingly common feature of current work environment and indeed in some sense, they are emblematic of working life in the 21st century. For instance, knowledge workers, especially professionals in client facing roles have to balance the demands of many internal and external parties, often with disparate wants and needs. The different goals held by heterogeneous role partners such as the clients, supervisor, managers, company officials and colleagues, can result in perceiving the need to meet multiple and often incompatible goals. Such employees also face issues with work-life balance, project/task allocation, and the impact of having too many responsibilities or too many clients (Albertsen et al., 2010; Benson & Brown, 2007; Hetland et al., 2007; Phelan et al., 1991). However, there is scarce evidence on the occupational health issues of such knowledge work professionals, hence we contextualized our study on understanding the extent of stress and burnout among consulting professionals in the areas of IT management services. Drawing from JD-R and COR theories, the goal of the present study was to understand the proactive coping role of employee job crafting in reducing detrimental or negative outcomes as well as increasing positive outcomes. Hence, the first aim of the study was to highlight the proactive effect of job crafting in reducing role stress and burnout, as well as increasing psychological availability; the second aim was to explain the influence of these inter-relationships on job performance.
Taking cues from the JD-R and COR theories that state resources to be instrumental in combating negative work conditions, we hypothesized that job crafting will reduce role stress and burnout. The perspective of proactive employee behaviours in stress research has been largely unexplored (Crant, 2000; Greenglass & Fiksenbaum, 2009; Schwarzer & Knoll, 2003). The individual resourcefulness of job crafting, wherein employees take initiatives to reduce demands and increase job and social resources, is instrumental in proactively decreasing stress and burnout levels of individuals. Recently, Tims, Bakker & Derks (2015) demonstrate the influence of job crafting at the collegial level, where individual job crafting resulted in increased role conflict and overload for colleagues. In turn, at the personal level, we show that job crafting decreases role stress for individuals. In addition, though not focused in our hypothesized model, results also show that role stress is likely to reduce the psychological availability of individuals, thus reinforcing the importance of fostering proactive initiatives through job crafting in order to control stressful work conditions. Tims, Bakker & Derks (2013) and Petrou, Demerouti & Schaufeli (2015) demonstrate that job crafting significantly decreases exhaustion levels of employees. Our study also shows job crafting to be effective in reducing work related burnout. Thus, besides extending job crafting theory, we add to the stress and proactive behaviour literature by showing that job crafting allows employees to proactively cope with their stress levels and reinforcing that job crafting reduces burnout based on evidence from an unexplored occupational and regional context.

Further, suggesting the proactive coping role of job crafting in not only reducing negative outcomes, but also in increasing positive outcomes, we hypothesized that job crafting will predict psychological availability among individuals. This is in line with the COR theory that explains how resources further lead to accumulation of resources. Hence, the individual resourcefulness of job crafting is likely to result in positive outcomes. Unlike earlier research that has largely emphasized on job outcomes (e.g. job satisfaction,
commitment, engagement) (e.g. Chen, Yen, Tsai, 2014), we considered the inclusion of psychological conditions or resources as a proximal outcome of job crafting, that may further explain the link between job crafting and other work outcomes. Our results indeed suggest more psychologically available employees as a result of undertaking crafting initiatives.

Finally, we hypothesized that role stress, burnout and psychological availability will mediate the relationship between job crafting and job performance. The results confirm mediation effects between job crafting and job performance through burnout and psychological availability. Though the results of role stress in influencing the performance effect of job crafting is not as expected, it should be noted that the influence of role stress on performance has been contradictory and debated in earlier studies (Fay & Sonnentag, 2012; Lindberg, Wincent & Ortvqvist, 2013). Indeed, this study contributes by presenting a multiple-mediator model in explaining the relationship between job crafting and job performance through the proactive coping role in reducing burnout and increasing psychological resource. Thus, we contribute to an integrated vision of occupational health that considers the simultaneous positive and negative responses of workers (Nelson & Simmons, 2003). This study also extends the search for explanatory mechanisms between job crafting and performance by examining holistically both positive and negative factors, as suggested in the JD-R and COR theories stressing the role of individual resourcefulness.

Our study also contributes to organizational scholarship by bringing together the stress-burnout literatures with proactive behaviour literature through focusing on job crafting as an effective employee initiated anticipatory or proactive coping mechanism for reducing stress and burnout, along with increasing individual or psychological resources and performance levels. In doing so, this study also provides evidence on the increasingly important, yet under-researched context of knowledge work professionals in terms of their increasingly taxing work life and occupational health concerns through a proactive
management lens. Additionally, our study also provides support to the global applicability and validity of the concept of job crafting by providing pioneering evidence on an emerging economy South-Asian context, thus relevant from an international employee management perspective.

**Limitations and Future Research**

The study is not without limitations. For example, the research design of this study is largely cross-sectional in nature and hence limits our ability to infer causality among examined relationships. However, it should be noted that the outcome variables of job performance and psychological availability were peer rated and that too after the stage of questionnaire completion by the respondents. Hence, the results of this study can be accepted as we took measures to control same source bias in the study design. But future studies will need to adopt a longitudinal or experimental design for confirming causal relationships. Also, the study sample of management consultants may not be representative of the general population as they are white-collar workers with an above-average level of education. However, in view of our focus to understand the occupational health issues of this unexplored group of knowledge professionals, the sample is deemed suitable, moreover, it offers evidence on a less researched response set, in terms of existing literature on stress, burnout and proactive coping. Nevertheless, future research can examine whether our findings are equally replicable in more diverse samples and work settings. Further, it is possible that there exist more complex relationships among examined variables. Though we tested multiple mediation effects, we did not model potential moderators among examined relationships. For example, Wrzesniewski & Dutton (2001) suggest that perceived opportunities to job craft and job characteristics may influence the examined relationships of job crafting. Hence, future research can explore the boundary conditions of our model, example exploring the role of extrinsic motivation or incentives in relation to job crafting.
**Practical Implications**

Management consultants are required to undertake a range of activities, roles and responsibilities involving the provision of their expertise to clients, as well as managing themselves and their businesses in a profitable manner (Kitay & Wright, 2007). The demands that knowledge workers or professionals have to face today within and across nations are expected to grow in the future, and call for investigation and understanding of their inner professional world (Kremer & Goldstein, 1990). Job crafting is a way that individuals customize their jobs and fit it to their own sense of what and how the job should be by optimizing their work environment (Wrzesniewski & Dutton, 2001; Tims et al., 2012).

Scholars assert that job crafting is both a trait and daily level behaviour and characteristic of employees across ranks, jobs and occupations (e.g. Berg, Wrzesniewski & Dutton, 2010; Petrou et al., 2012; Wrzesniewski & Dutton, 2001). Since, job crafting influences which tasks get completed, how employees complete them and the interpersonal dynamics of the workplace, it has the potential to greatly impact individual and as well as organizational performance (Wrzesniewski & Dutton, 2001). This is especially true from the view of proactive coping, as employee job crafting is instrumental in decreasing negative outcomes, as well as increasing positive outcomes, which will eventually result in improved job performance and thus professional wellbeing.

In the light of employees influencing their own job characteristics through proactive efforts of job crafting, this study suggests the importance of focusing on individual perspectives when considering performance outcomes. Employees who attempt to craft through available job demands and resources are more psychologically available at work as well as more efficient in combating stress and burnout. Such personalized proactive coping efforts and individual resourcefulness results in higher performance outcomes for employees. Thus, organizations can train and guide their employees by equipping them with skills and
foster information to realize the opportunities to job craft. Job crafting interventions can be developed that facilitates the acquisition of job, social and personal resources, example through presentations and exercises convened to raise awareness of resources and to highlight opportunities to extend these resources, while also emphasizing the benefits to employees (Bakker et al., 2012). Particularly, in the context of knowledge work professionals, coaching and mentoring might serve as the best way to understand their needs and provide them with essential expertise or guidance in managing and crafting their jobs. At the organizational level, managers and leaders should design a work environment which enables employees to be proactive and feel psychologically available or confident to perform and be productive, while efforts aimed at the reduction and prevention of burnout should also be an important concern for managers and organizations.

Conclusions

Given the exponential increase of internal and external pressures on jobs, the relation between such pressures and work outcomes is receiving increased attention of scholars and practitioners. In order to understand such dynamics, a number of factors need to be taken into account such as proactive behaviors at work, example, job crafting or the self-initiated work related changes made through balancing job demands and resources. This study suggests that burnout and psychological availability function as critical elements by channelizing the performance effect of job crafting, thus supporting the integrated vision of occupational health in considering both positive and negative responses of workers, as well as the importance of individual resourcefulness in organizational setup. Thus, managers desiring to hire proactive employees capable of coping should consider individuals that craft or have the potential to job craft; while, organizations should endeavour to build a work climate that understands and encourages employee job crafting which will make them less stressed and burnout, and thus boost their psychologically availability and performance at work. This is
important because employee well-being, i.e. both personal and professional results matters for our health, our relationships and our economy.

References


  *Journal of Managerial Psychology*, 22, 309-328.

model to predict burnout and performance. *Human resource management*, 43 (1), 83-
104.

Bakker AB, Tims M, Derks D (2012). Proactive personality and job performance: The role of 

turns them away. *Work, Employment and Society* 21(1), 121–141.

matter?* Ann Arbor, MI: University of Michigan Ross School of Business. Retrieved 
from http://www.bus.umich.edu/Positive/ POS-Teaching-and-Learning/ListPOS-
Cases.htm

challenges in job crafting at different ranks. *J. of Organizational Behavior*, 31,158-
186.


Editions*, 154, 136.

Relations*, 441-453.


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<tr>
<th>First Order Latent Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Composite construct reliability</th>
<th>Average variance extracted</th>
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<tr>
<td>1. Job Resource</td>
<td>4.56</td>
<td>0.92</td>
<td>(.93)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>93</td>
<td>.74</td>
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<tr>
<td>2. Social Resource</td>
<td>3.20</td>
<td>0.97</td>
<td>.38***(.96)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>96</td>
<td>.77</td>
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<tr>
<td>3. Challenge Demand</td>
<td>2.91</td>
<td>0.79</td>
<td>.39***(.87)</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>87</td>
<td>.57</td>
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<tr>
<td>4. Hindering Demand</td>
<td>3.95</td>
<td>0.68</td>
<td>.38***.26**.30*** (.94)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>94</td>
<td>.66</td>
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<tr>
<td>5. Burnout</td>
<td>3.98</td>
<td>0.70</td>
<td>.34***.20***.31***.33*** (.89)</td>
<td></td>
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<td></td>
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<td>.55</td>
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<tr>
<td>6. Psychological Availability</td>
<td>3.63</td>
<td>0.90</td>
<td>.30***.32***.25***.17***.26*** (.91)</td>
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<td>.72</td>
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<tr>
<td>7. Role Conflict</td>
<td>3.13</td>
<td>0.94</td>
<td>.27***.23***.14’ .20’ .21’ .29*** (.92)</td>
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<td>8. Role Ambiguity</td>
<td>2.99</td>
<td>0.96</td>
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<td>9. Role Overload</td>
<td>3.84</td>
<td>0.91</td>
<td>.30***.25***.01 .20’ .29***.19’ .66*** .35*** (.85)</td>
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<td>.61</td>
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<td>10. Job Performance</td>
<td>4.01</td>
<td>0.71</td>
<td>.21***</td>
<td>.18**</td>
<td>.24***</td>
<td>.33***</td>
<td>.30***</td>
<td>.10</td>
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</tbody>
</table>

N=268. Cronbach’s α in parentheses.

1, 2, 3 & 4 are dimensions of job crafting; 7, 8 & 9 are dimensions of role stress

† p < .10
* p < .05
** p < .01
*** p < .001
Figure 1. Hypothesized Model.

Note: Job crafting and Role stress are second order latent variables.
Figure 2. Structural Model.

<table>
<thead>
<tr>
<th>Fit Measures</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>TLI</th>
<th>CFI</th>
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<td>1.95</td>
<td>0.06</td>
<td>0.08</td>
<td>0.93</td>
<td>0.93</td>
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</table>

n=300. Standardized regression weights are shown.

Job crafting and role stress are second-order latent variables.

*** p < .001; ** p < .01; * p < .05 (two-tailed tests). CMIN/DF = chi-square divided by degrees of freedom. RMSEA = root mean square error of approximation. SRMR = standardized root mean square residual. TLI = Tucker-Lewis index. CFI = comparative fit index.