
This item was submitted to [Loughborough's Research Repository](#) by the author.
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

Managerial work characteristics and organizational commitment after offshoring. The moderating effect of perceived organizational valence

PLEASE CITE THE PUBLISHED VERSION

<https://doi.org/10.5465/AMBPP.2017.11561abstract>

PUBLISHER

© Academy of Management

VERSION

AM (Accepted Manuscript)

PUBLISHER STATEMENT

This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Zimmermann, Angelika, Eleni Lioliou, and Joao S. Oliveira. 2019. "Managerial Work Characteristics and Organizational Commitment After Offshoring. The Moderating Effect of Perceived Organizational Valence". figshare. <https://hdl.handle.net/2134/27136>.

**MANAGERIAL WORK CHARACTERISTICS AND ORGANIZATIONAL
COMMITMENT AFTER OFFSHORING: THE MODERATING EFFECT OF
PERCEIVED ORGANISATIONAL VALENCE**

ABSTRACT

Offshoring affects the nature of work in onshore locations, but little is known about job incumbents' reactions to these changes. Based on concepts of work design, we demonstrate how offshoring related changes in onshore managers' work characteristics are associated with their affective organizational commitment. Drawing on the organizational change literature, we further investigate how this association is moderated by managers' perceptions of the benefit that offshoring has for the organization, i.e. perceived organizational valence. We found that both job complexity and international working were positively associated with higher organizational commitment, and that the magnitude of such associations enhanced as organizational valence became higher. Changes in skill variety by contrast were not associated with organizational commitment, regardless of the strength of organizational valence. Our findings serve to extend prior job characteristics models, explain diverse reactions of onshore employees to offshoring, and deepen our understanding of contemporary changes to the nature of work in developed countries.

INTRODUCTION

The globalization of contemporary business, underpinned by modern Information Technologies, has enabled organizations to distribute their operations across multiple countries, including low-cost destinations. This redistribution has arguably led to some of the most prominent changes to work in the Western world. Offshoring - the transfer of work to internal or external providers in an offshore location - has played an important part in this development. Whilst there is emerging evidence on how offshoring affects the nature of work in onshore locations, we yet know little on how employees react to these changes.

A large public debate surrounds the positive and negative effects that offshoring has on employment in highly developed countries at large (e.g. Aspray, Mayadas, & Vardi, 2006; Mankiw, & Swagel, 2006; United Nations, 2005). This debate has been fuelled primarily by the economic implications of offshoring on work and employment in the developed world. However, only a few studies have taken a more micro-perspective, and investigated the effects that offshoring has on the nature of work in onshore locations. This stream of research, has identified that offshoring of lower end, routine tasks is seen to entail a concentration of higher end, more complex jobs in the onshore countries (Davis-Blake, & Broschak, 2009; Goo, Manning, & Salomons, 2014; Ottaviano, Peri, & Wright, 2013). With the need to work across onshore and offshore locations, it is also likely that employees are required to increasingly work internationally and excel at international project management, coordination, and cross cultural communication (Bidanda, Arisoy, & Shuman, 2006; Davis-Blake, & Broschak, 2009). Managers will therefore have to develop a broader skill set beyond traditional management techniques (Davis-Blake, & Broschak, 2009).

A small number of studies has further demonstrated that onshore employees react differently to such changes on their work characteristics (Zimmermann, & Ravishankar, 2016; Zimmermann, Raab, & Zanotelli, 2012). Whilst some employees support the offshoring of

tasks wholeheartedly by spending personal effort in knowledge transfer or mentoring offshore colleagues, others are seen to avoid the task transfer wherever possible (Metiu, 2006; Zimmermann et al., 2012). Prior research has attributed these different reactions primarily to employees' varied evaluation of offshoring (Metiu, 2006; Zimmermann, & Ravishankar, 2016). For example, the move of routine tasks to offshore destinations can be regarded either as an opportunity to concentrate on more complex work, or as a threat to one's own technical expertise and career (Metiu, 2006), leading to either cooperation or resistance to offshoring (Zimmermann, & Ravishankar, 2011; Zimmermann et al., 2012). Similarly, the need to concentrate on international coordination and mentoring is by some regarded as enriching and by others as an additional burden, resulting in varying degrees of support for the offshoring operation (Zimmermann et al., 2012; Zimmermann, & Ravishankar, 2016). Employees can also hold contrasting views on offshoring with regards to outcomes that are relevant for the organization, for example regarding the effects of offshoring on performance, efficiency, cost savings, and the potential loss of core competences at the onshore unit, combined with the danger of over-dependence on the offshore unit (Dibber, Winkler, & Heinzl, 2008; Zimmermann et al., 2012). Employees who hold negative views on these outcomes are less likely to support the transfer of tasks to their offshore colleagues (Zimmermann et al., 2012; Zimmermann, & Ravishankar, 2014; 2016)

This research on employee reactions to offshoring related changes in work characteristics relies however only on a small number of qualitative case studies. By contrast, the well-established literature on work design provides a large body of quantitative evidence on the effects that certain 'work characteristics' have on employee attitudes, behaviours, and well-being (Hackman, & Oldham, 1980; Humphrey, Nahrgang, & Morgeson, 2007; Parker, 2014 for reviews). Following the terminology of work design, some of the described changes to onshore jobs can be described as changes in such work characteristics. The greater focus on

highly skilled and complex tasks can be classified as increased 'job complexity' (Morgeson, & Humphrey, 2006). The new requirement of working internationally with offshore colleagues can be described as a social work characteristic, and the need for additional skills can be regarded as increased 'skill variety' (Hackman, & Oldham, 1980).

Interestingly, the work design literature suggests that increased job complexity, social interactions, and skill variety are associated with positive outcomes regarding employee attitudes, behaviours, and well-being (Humphrey et al., 2007). This observation seems to contradict the finding that employees can react either positively or negatively to changes to their jobs after offshoring. It is therefore important to establish what effects offshoring related changes to particular work characteristics have on employee level outcomes, and to identify what factors impinge upon this relationship. In this study, we focus on affective organizational commitment as an attitudinal outcome, which is paramount to organizations and which has been linked to work characteristics (e.g. Humphrey et al., 2007) as well as organizational change (e.g. Raffert, Jimmieson, & Armenakis, 2013).

Moreover, researchers have long recognized that for organizational change to be successful, it is significant that firms manage to get employees on board and commit them to the overall purpose of the change. A lack of people's belief in the purpose of change is seen to contribute significantly to failed change projects (Conner, 2006; Conner, & Patterson, 1982). In this frame, we will argue that employees' perceptions of the benefits of that offshoring has for the organization, i.e. their perceptions of organizational valence, are an important moderator of the relationship between offshoring related changes to work characteristics and affective organizational commitment. We support this argument by reference to the organizational change literature, which has demonstrated that organizational change affects employee attitudes (including organizational commitment), but also that this effect is subject to employees' readiness for change. Perceived organizational valence is an important

component of this readiness for change (Caldwell, 2013; Holt, Armenakis, Feild, & Harris, 2007).

In our study, we focus on middle managers, a group of employees who are likely to be involved in international coordination, collaboration and management after offshoring and whose work is therefore likely to be affected through offshoring. Applying constructs from the work design literature and the organizational change literature, we thus examine the following research questions:

- How do offshoring related changes to onshore managers' work characteristics with regards to (a) job complexity, (b) international working and (c) skill variety affect the levels of onshore managers' affective organizational commitment?
- Are these effects moderated by perceived organizational valence?

In what follows, we develop our arguments firstly by reviewing research on offshoring related changes to work characteristics, centring on job complexity, working internationally and skill variety. Drawing on the work design literature, we then highlight employees' reactions to these changes, with a particular focus on organizational commitment. This leads to our first hypothesis. We then draw on the organizational change readiness literature to argue for a moderating effect by organizational valence, entailing our second hypothesis. After this we present our methods and results sections. We discuss our contributions with regard to research on work design and offshoring, outline practical implications, and conclude by highlighting limitations of the study and directions for future research.

BACKGROUND AND HYPOTHESES

Offshoring and changes in managerial work characteristics

The consequences of offshoring for employment and work in the developed world has long been the subject of economic and public debates (see Aspray et al., 2006; Mankiw, & Swagel, 2006). At a country level, there are arguments that offshoring leads to a decrease in low end work in the home country (Harrison, & McMillan, 2006) and an increase in higher skilled work (United Nations, 2005), which have also been described as more complex (Goos et al., 2014; Ottaviano et al., 2013; Robert-Nicaud, 2008). A primary explanation is that offshoring leads to productivity gains for onshore countries, allowing for the creation of more jobs in the highly skilled sector (Aspray et al., 2006; Mankiw, & Swagel, 2006). Interestingly, Abramovsky, Griffith and Miller (2016) provide evidence to show that even the offshoring of higher-end, innovative work does not substitute equivalent onshore work, but complements it. They attribute this to the non-competitive nature of knowledge work, whereby an increase in offshore innovative work can lead to knowledge exchange between onshore and offshore knowledge workers that serves to augment the productivity of onshore workers. Offshoring is also seen to increase the complexity of existing jobs that are knowledge intensive (Davis-Blake, & Broschak, 2009). Job complexity can here be characterized as ‘the extent to which the tasks on a job are complex and difficult to perform’ (Humphrey, & Morgeson, 2006: 1323). Firstly, the offshoring of routine tasks allows onshore employees and firms to concentrate to a greater extent on complex tasks, such as research and development (e.g. Davis-Blake, & Broschak, 2009; Goos et al., 2014; Ottaviano et al., 2013; Zimmermann, & Ravishankar, 2011). Secondly, offshoring typically requires onshore employees (and managers in particular) to work internationally, namely to distribute and coordinate task components across national boundaries, manage multiple interfaces and time zones, and communicate across organizational and cultural contexts. These requirements further increase job complexity (Nurmi, & Hinds, 2016).

Working internationally can be viewed as a social (as opposed to task-related) work characteristic. By adding this variable as a new work characteristic we respond to recent calls for more research on the social characteristics of modern jobs (Grant, & Parker, 2009; Parker, 2014). We argue that working internationally is an important work characteristic as it is becoming increasingly prevalent, not only in offshoring settings, but in many other forms of international collaborations such as global virtual teams and expatriate assignments.

Increased job complexity as well as international working require onshore employees to develop new, non-technical skills with regard to communication, coordination, international collaboration (e.g. Bidanda et al.; Davis, Ein-Dor, King, & Torkzadeh, 2006; United Nations, 2005), and managing processes to integrate distributed work (Davis-Blake, & Broschak, 2009). We can therefore assume that offshoring increases the variety of skills required in onshore managers' jobs (see Davis-Blake, & Broschak, 2009). We here apply Hackman and Oldham's (1975:161) definition of skill variety as 'the degree to which a job requires a variety of different activities to carry out the work, which involve the use of a number of different skills and talents of the employee'.

Reactions to changes in managerial work characteristics – organizational commitment

As mentioned in the introduction, only a small number of studies have examined the effects of offshoring related work changes on employees' attitudes and behaviours, particularly in the context of developed economies (Metiu, 2006; Zimmermann et al., 2012, Zimmermann, & Ravishankar, 2011; 2014; 2016). These studies have highlighted that employees react to such changes in *divergent* ways, for example by either supporting or avoiding the transfer of tasks, depending on their evaluations of the changes. If we turn to the literature on work design however, we find long-standing support for the view that the 'enriched' work, characterized amongst others by the work characteristics in question here (job complexity, social work

characteristics, and skill variety) has *positive* effects on attitudinal, behavioural, and well-being outcomes.

Work design research roots in Hackman and Oldham's (1980) job characteristics model (JCM), which posits that five characteristics of enriched jobs, namely high skill variety, task significance, task identity, autonomy, and feedback, support the work incumbent's psychological states of 'experienced meaningfulness', 'experienced responsibility', and 'knowledge of results'. The work characteristics model was later extended to include additional characteristics such as knowledge demands, information processing, problem solving, specialization, and job complexity (see Morgeson, & Humphrey, 2006). Through their effects on the psychological states, job characteristics are thought to support favourable attitudinal, behavioural, and well-being outcomes, such as job satisfaction, organizational commitment, performance, and burnout. The last two decades have produced a large body of evidence to support these effects (Humphrey et al, 2007; Parker, 2014, for reviews).

For our study, we chose *affective organizational commitment* as the outcome of interest. Compared to other outcomes of work characteristics such as job satisfaction and performance, organizational commitment is relatively less examined. Nevertheless, organizational commitment is paramount for firms aiming to develop highly committed knowledge workers, minimize employee turnover, and thereby enhance firm performance. To illustrate, a meta-analysis by Meyer, Stanley, Herscovitch, and Topolnytsky (2002: 20) suggests that affective commitment has 'favourable correlations with organization-relevant (attendance, performance, and organizational citizenship behaviour) and employee-relevant (stress and work-family conflict) outcomes.' In the same vein, proponents of 'high commitment work practices' claim that developing highly committed employees is central to the competitive advantage of a firm (Huselid, 1995).

In line with Mowday, Steers, and Porter (1979: 226) we define organizational commitment as an individual's strong belief in and acceptance of the organization's goals and values, a willingness to exert considerable effort on behalf of the organization, and a strong desire to maintain membership in the organization. Meyer and Allen (1991) later termed such commitment 'affective' commitment in distinction from continuance commitment (the need to maintain employment in the organization) and normative commitment (the obligation to maintain employment in the organization).

Job complexity has only relatively recently been identified as a distinct work characteristic (Morgeson, & Humphrey, 2006), and most work design research equates job complexity with job enrichment, i.e. the composite of the job characteristics in the JCM (skill variety, task identity, etc.). It is hence not surprising that there is as yet little research on the effects of job complexity as a separate job characteristic on attitudinal outcomes. Humphrey et al.'s (2007) review of work design research does hypothesize a positive relationship between job complexity and organizational commitment, but due to a lack of prior studies they could not include this relationship in their meta-analysis. Job complexity as a composite of work characteristics has however been found to be significantly associated with organizational commitment (e.g. Joo, & Lim, 2009; Pentareddy, & Suganthi, 2015). Accordingly, Humphrey et al.'s (2007) meta-analysis demonstrated that the work characteristics of enriched jobs (autonomy, skill variety, task identity, task significance, and feedback from the job) explained 24% of the variance in organizational commitment. Interestingly, very high levels of job complexity have been found to yield the negative outcomes of exhaustion (Xie, & Johns, 1995) and decreased creativity (Elsbach, & Hargadon, 2006), indicating that there may be a curvilinear relationship between job complexity and such outcomes (Humphrey et al., 2007).

As mentioned, we regard *international working* as a social work characteristic that is important in an offshoring context. Whilst research has demonstrated the consequences of international and virtual working on employee outcomes such as job satisfaction (Baltes, Dickson, Sherman, Bauer, & LaGanke, 2002) and professional role identity (Zimmermann, & Ravishankar, 2011), we found only one study that examines working internationally through a work design lens: Nurmi and Hinds (2016) demonstrate that ‘global virtual work’ was perceived as having greater job complexity (defined as the composite of autonomy, feedback, skill variety, task identity, and task significance). Whilst organizational commitment was not included in their study, job complexity was found to moderate the effects of global virtual work on three employee level outcomes: job satisfaction, work engagement, and innovative performance.

Notably, Nurmi and Hinds (2006) do not regard global virtual work as a work characteristic per se, but measure it as a dichotomous variable capturing whether a the respondent was in a different country than any of his/her co-workers. This variable is then linked with the named work characteristics of the JCM model. We by contrast argue that working internationally is a work characteristic that can be distinguished from the other work characteristics of the JCM model, and it comprises coordinating work across boundaries as well as dealing with cross cultural differences in work practices and communication styles. Nurmi and Hinds’ (2016) research is nevertheless informative for our study. Their finding that global virtual work is beneficial for job complexity and through this job satisfaction indicates that working internationally may also have a positive association with organizational commitment, given that organizational commitment has been linked with job complexity (e.g. Pentareddy, & Suganthi, 2015) as well as job satisfaction (Welsch, & LaVan, 1981). We thus assume that working internationally is part of job enrichment and has a positive effect on affective commitment to the organization.

A similar argument holds for the third job characteristic of interest in our study, *skill variety*. Given that according to the JCM skill variety is a core characteristic of enriched jobs, we can assume that it is also positively associated with organizational commitment. In support of this view, Humphrey et al.'s (2007) meta-analysis of work design research showed a positive relationship between skill variety and organizational commitment ($p=.28$), including nine studies that examine the correlation between the two variables, covering in sum 4,799 participants. Based on our review of the job design literature, we put forward the following hypothesis:

Hypothesis 1: Offshoring related changes to onshore managers' work characteristics with regard to (a) job complexity, (b) working internationally and (c) skill variety will be positively related to managers' affective organizational commitment.

The moderating role of organizational valence

Whilst the reviewed work design literature clearly suggests a positive association of the work characteristics in question (job complexity, working internationally, and skill variety) with organizational commitment, we are still confronted with the contradictory finding in the offshoring literature that employees can react either positively and negatively to offshoring and to resultant changes to their work (Metiu, 2006; Zimmermann et al., 2012, Zimmermann, & Ravishankar, 2001; 2014; 2016). Prior offshoring research also suggests that employees' reactions to offshoring depend on their evaluations of its consequences for the organization. If employees are convinced that offshoring is detrimental to task performance and does not improve costs or efficiency (e.g. through additional coordination requirements), they are less likely to support the offshoring operation (Zimmermann, & Ravishankar, 2014; 2016). We can therefore assume that employees who do not believe that offshoring is beneficial for the organization will not subscribe to the organization's decision to offshore, which may dampen

their commitment to the organization. Conversely, if employees regard offshoring as beneficial for the organization they will to a greater extent embrace the changes that offshoring creates in their work characteristics, and will therefore be more committed to the organization. In other words, we assume that increased job complexity, international working and skill variety will have more positive effects on organizational commitment if employees perceive these changes to be beneficial for the organization and therefore to 'make sense'.

This line of reasoning can be supported by the notion of 'readiness for change' (Rafferty et al., 2013) if we regard offshoring related changes in job characteristics as a type of organizational change. Organizational change in general has been shown to affect attitudinal outcomes, including organizational commitment. For example, Fedor, Caldwell, and Herold (2006) provide evidence that job level changes (such as changes in the nature of a job and increased work demands) affect individuals' commitment to their organization. Morrow (2013) similarly regards job redesign as an organizational change, but she observes that this does not always produce the intended positive effect on organizational commitment.

Individuals' readiness for change is an important moderator of the relationship between organizational change and commitment. Change readiness has been defined as an individual's 'beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully undertake those changes' (Armenakis, Harris, & Mossholder, 1993: 68). The more organizational members perceive change as important, beneficial and worthwhile, the more they will support it (Weiner, 2009), and the less likely they will demonstrate negative attitudinal outcomes.

We will single out perceived organizational benefit, also called organizational valence, as a particular component of such readiness for change. Organizational valence has been defined as 'the extent to which one feels that the organization will or will not benefit from the implementation of the prospective change' (Holt et al., 2007: 239).

Organizational valence has also been distinguished from personal valence, i.e. the extent to which an individual feels that he or she will or will not benefit from the implementation of the prospective change (Holt et al., 2007: 238). It has previously been argued that messages about organizational benefits are not salient to individuals unless their own job requirements are affected (Burke and Litwin, 1992; Caldwell, 2013). In our offshoring scenario, we capture this relevance of organizational level change to the individual by examining the extent to which organizational level offshoring affects individuals' job characteristics. We further argue that individuals will react to these organizational level changes differently depending on the extent to which they believe that offshoring is beneficial for the organization. We thus assume that organizational level benefits do matter to individuals and will affect their reactions to individual level changes in job characteristics. We thereby concord with recent observations that organizational and individual level changes interact (Vakola, 2013). On the basis of these considerations, we hypothesize:

Hypothesis 2: Perceived organizational valence will moderate the positive relationship of (a) job complexity, (b) working internationally, and (c) skill variety with affective organizational commitment

METHODS

Participants

We conducted an online survey on a sample of UK firms, the UK being one of the major countries involved in offshoring. We focussed on offshoring to captive (i.e. in-house) centres of firms, also termed offshore development centres (ODCs). The participants were given the following definition of an ODC: 'A wholly or partly owned subsidiary, with a dedicated team and infrastructure, located offshore, that is used for developing, testing and deploying software.' We conducted our investigation in medium and larger firms, given that captive

offshoring is here more typical than in smaller firms. We further focused our study on organizations that were offshoring software related work, because this sector has probably the longest experience offshoring, promising mature insights into offshoring from our participants.

The sample included firms various different industries including, but not limited to, the following: financial services; retail; manufacturing; information technology and telecommunications; business and professional services; media, leisure and entertainment; construction and engineering; consumer services; transport and travel and; logistics. We gathered responses from organizations that had relatively recently engaged offshoring initiatives as well as more experienced organizations and organizations that were ‘veterans’ in offshoring initiatives.

As individual participants, we included directors and managers of functional business areas, as well as managers of software development projects. We considered that the work characteristics of such middle manager were likely to be affected through offshoring, as such managers are typically involved in the coordination and collaboration between onshore and offshore sites. Moreover, previous research suggests that managers have to focus more intensively on their coordinative and conceptual work when technical tasks are offshored (Zimmermann, & Ravishankar, 2011). Through screening questions, we ensured that the business unit of all participants had conducted offshoring of software development, that all participants had experienced some changes to their work as a result of this offshoring, and that the participants were familiar with the offshoring operation. Our participants had a wide range of tenure, ranging from relatively new employees to those that had a few or many years of working experience in their organization.

We included 3007 individuals employed in UK companies. Out of these, 570 individuals were identified as suitable to participate in our survey (i.e. these individuals

satisfied all of the criteria in our screening questions). In total, we gathered 150 fully completed questionnaires, which resulted to a response rate of 26.3%.

Measures and control variables

Job complexity. We used three items from the reverse coded scale on job complexity developed by Morgeson and Humphrey (2006). Each item was rated on a five-point scale, ranging from (1) strongly disagree to (5) strongly agree. We adapted the items to reflect the changes on the complexity of individuals' work that resulted from offshoring. In particular, the items we included in our study were as follows: As a result of offshoring, 1. 'the job now requires that I only do one task or activity at a time', 2. 'the job now comprises less complicated tasks, 3. 'the job now involves performing simpler tasks'.

Working internationally. In order to measure working internationally, we developed our own measure, based on the reflections of Davis-Blake and Broschak (2009) and Zimmermann and Ravishankar (2014; 2016) on the international working requirements after offshoring. We developed a 3-item scale, ranging from (1) to a much smaller extent to (5) to a much greater extent. In our examination of international work, we included aspects of international coordination, as well as cross-cultural work and communication. In particular, the items we included in our study are as follows: As a result of offshoring, my job now requires me to 1. 'coordinate work across national boundaries', 2. 'deal with cross cultural differences in work practices' and 3. 'deal with cross cultural differences in communication styles'

Skill variety. We used 3 items from the scale on skill variety developed by Morgeson and Humphrey (2006). Each item was rated on a five point scale, ranging from (1) strongly disagree to (5) strongly agree. We adapted the items to reflect the offshoring-related changes on the variety of skills required to perform individual work. In particular, the items we

included in our study were as follows: As a result of offshoring, 1. 'the job now requires a greater variety of skills', 2. 'the job now requires me to use a greater number of complex or high-level skills, 3. 'the job now requires the use of a greater number of skills'.

Organizational valence. We measured organizational valence using six items, originating from the work of Holt et al. (2007). We adapted the items in order to capture the extent to which individuals perceived offshoring as beneficial to the organization. Each item was rated on a 5 point scale, ranging from (1) strongly disagree to (5) strongly agree. In particular, the items we included were as follows: When offshoring was implemented: 1. 'I thought the organization would benefit from offshoring', 2. 'I thought our organization would be more productive when implementing offshoring', 3. 'I believed that when we adopted this change, we would be better equipped to meet our customers' needs', 4. 'I believed offshoring would improve our organization's overall efficiency'.

Affective organizational commitment. We measured affective organizational commitment using four items, based on the scale developed by Hartline, Maxham, and McKee (2000). We adapted the items in order to capture how individuals' affective organisational commitment was affected by offshoring. Each item was rated on a five-point scale, ranging from (1) strongly disagree to (5) strongly agree. In particular, the items we included were as follows: Since offshoring, 1. 'I have been willing to put in a great deal of effort beyond that normally expected in order to make this organization be successful', 2. 'I have been proud to tell others that I am a part of this organization', 3. 'This organization has inspired the very best in me in the way of job performance', 4. 'I really care about the fate of this organization'.

Control variables. In our examination, we firstly controlled for the industry of the participants, assuming that organizational commitment may vary across industries, for example due to differences in organizational climates between industries. We asked

participants to locate their organization within a choice of sectors their organization, including: 1. Finance, 2. Retail, 3. Manufacturing, 4. IT and 5. Other industries. We also controlled for employee tenure, considering two potential influences: Firstly, employees who have already stayed with a company for a long period may also be more committed to it. Secondly, prior studies have found that new employees tend to react more favourable towards various organizational practices and changes during their first time with organizations, which is commonly referred to as the “honeymoon period” (Wright, & Bonett, 2002). During this “honeymoon period” employees view their organization in a very positive light and they feel very committed to it. Therefore, it is likely that newer employees will react more positively to certain organizational changes (including offshore-related changes) as a result of the “honeymoon” effect.

We asked individuals ‘For how long have you been in your current job’ and included the following items: 1. less than a year, 2. more than a year and less than 3 years, 3. more than 3 years. Assuming that consequences of offshoring related changes may emerge increasingly over time, we further controlled for the time that had elapsed since the initiation of offshoring in the relevant business unit,. We asked participants ‘How long ago did offshoring first take place within your business unit?’ and included the following items: 1. less than a year, 2. more than a year and less than 3 years, 3. more than 3 years.

ANALYSES AND FINDINGS

Measure validation

To assess measurement scale validity and reliability, we performed a confirmatory factor analysis (CFA) using LISREL 8.80 (Jöreskog, & Sörbom, 2007). We adopted maximum likelihood estimation, and judged model fit using common indicators (Diamantopoulos, & Siguaw, 2009). The fit obtained shows that our measurement model has a good fit with the

data. Table 1 shows the measurement model statistics, and inter-construct correlations. Inspection of Table 1 reveals that the key fit indicators of our measurement model are within recommended thresholds. This suggests good fit with the data. All average variances extracted (AVEs) and composite reliabilities comfortably surpassed the 0.5 and 0.6 thresholds, respectively. In addition, all AVEs were higher than the squared correlations among latent constructs, which lends support to the discriminant validity of our measures. We therefore concluded that our measures yield sufficient convergent and discriminant validity for model testing.

Insert Table 1 about here

Common method variance (CMV) assessment

We adopted a number of research design procedures to guard against the possibility of CMV (Chang, Witteloostuijn, & Eden, 2010). In this context, we adopted reverse coding, used different scale anchors for different constructs, and utilized various different response formats (e.g. radio buttons, dropdown menus). We also ran Harman's one factor test in CFA to check for CMV. The test produced poor model fit statistics (chi-square = 785.62, $p = 0.00$, d.f. = 119, RMSEA = 0.19, standardised root mean square residual (RMR) = 0.15). Finally, our model comprises various relationships that are not obvious to respondents (e.g. moderating effects). It would have been, hence, very difficult for respondents to mentally anticipate the relationships under investigation (Palmatier, 2016). Therefore, we came to the conclusion that CMV is unlikely to be a problem in the present study.

Structural model estimation

We utilized conventional product-term analysis to test for moderation effects (Ping, 1995). We anticipate that organizational valence moderates the relationships between affective

organizational commitment and, a) job complexity (H2a), b) working internationally (H2b) and c) skill variety (H2c). Accordingly, we calculated the required multiplicative terms and entered them into the model equation. In line with established practice, we also included the direct effects of job complexity, skill variety, working internationally, and organisational valence in the model (Aiken, & West 1991). We further included a number of control variables, namely the firm's industry, the individual's tenure, and the recency of offshoring, i.e. the time elapsed since the initiation of offshoring in the individual's business unit.

Following established procedure (Ping, 1995) we used single indicants to estimate interactions between latent constructs. This method is recommended to reduce model complexity (Jaccard, & Wan, 1996). We calculated single indicants for job complexity, skill variety, working internationally, and organizational valence via computing the average of the corresponding measurement items. The firm's industry, then individual's tenure, and the firm's recency of offshoring were already measured through single-item scales. We modelled affective organizational commitment as a first-order latent variable of its four items. We set the error variances of each single indicant at $[(1 - \alpha) \times \sigma^2]$, where α is the construct reliability and σ is the standard deviation of the single indicant (Jöreskog, & Sörbom, 1993). We followed the rules established by Ping (1995) for the purpose of setting the loadings and the error variances of the interaction terms. Precisely, we ran a CFA where we included the dependent latent variable (affective organizational commitment) and all the independent latent variables involved in the interaction terms (job complexity, skill variety, working internationally, and organizational valence). The independent latent variables contained only a single indicant, since this significantly simplifies the estimation procedure. We set the loadings of the corresponding single indicants at 1 and the error variances at $[(1 - \alpha) \times \sigma^2]$ (Jöreskog, & Sörbom, 1993). We saved the standardized estimates from this CFA and inserted

those values into the equations offered by Ping (1995), in order to obtain estimates for the loadings and for the error variances of the interaction terms.

We subsequently ran two structural models in LISREL 8.80 (Jöreskog, & Sörbom, 2007), specifically a constrained model and an unconstrained model. In the case of the constrained (Model 1, Table 1) model we allowed only for the direct effects to be estimated freely. Accordingly, we fixed the interaction terms at zero. In the case of the unconstrained model (Model 2, Table 1) we allowed for all the effects to be estimated freely. Inspection of Table 1 reveals that the decrease in chi-square associated with moving from the constrained model to the unconstrained model was statistically significant [Δ chi-square (Δ d. f.) = 10.71(3), $p < 0.05$]. Furthermore, the model explained 8.24% more variance in the dependent variable relative to the constrained model. We thus concluded that the unconstrained model fits the data better than does the constrained model. In addition, contrarily to the constrained model, the unconstrained model yielded a non-significant chi-square (chi-square = 61.93, $p > 0.05$), and its key fit indicators were within recommended thresholds (RMSEA = 0.05; CFI = 0.98; NFI = 0.93; NNFI = 0.91). These figures suggest an excellent fit of the unconstrained model with the data (Diamantopoulos, & Siguaaw, 2009). We were hence confident that the unconstrained model was appropriate for hypothesis testing.

Hypotheses testing

Table 2 depicts the standardized coefficients for both the constrained model and the unconstrained model. It also displays the corresponding t-values. Since our hypotheses are directional (they predict positive/negative direct/moderating effects) we utilized one-tailed tests to judge the strength and statistical significance of the estimates (Diamantopoulos, & Schlegelmilch, 2000). Accordingly, t-values were considered significant at the 5% and 1%

levels if their absolute values surpassed 1.65 and 2.33, respectively. As outlined in the previous section, we used the unconstrained model for hypothesis testing.

Insert Table 2 about here

As can be seen in Table 2 (unconstrained model), with regard to H1a, the coefficient linked to job complexity is not significant ($\gamma_1 = .03$, $t = 0.36$, $p > 0.05$). Such a finding indicates the lack of a ‘main’ effect of job complexity on affective organizational commitment. However, the coefficient associated with the product term corresponding to the moderating effect of organizational valence on the job complexity-affective organizational commitment link (i.e. γ_5) is significant (see discussion below). Because H1a is nested within that product term, the product term will have ‘the final say’ in terms of the impact of job complexity on affective organizational commitment (c.f. Kam & Franzese, 2007). With regard to H1b, the coefficient associated with working internationally is positive and significant ($\gamma_3 = .22$, $t = 3.00$, $p < 0.01$). Therefore, H1b is supported. As far as H1c is concerned, the coefficient associated with skill variety is not significant ($\gamma_2 = .12$, $t = 1.38$, $p > 0.05$), neither is the coefficient of the product term in which skill variety is nested (γ_6). Therefore, H1c is not supported. The interaction between job complexity and organizational valence is significant and positive ($\gamma_5 = .14$, $t = 1.99$, $p < 0.05$). This result corroborates H2a (i. e. that organizational valence moderates the relationship between job complexity and affective organizational commitment). It also provides support for H1a (i.e. job complexity has a positive impact on affective organizational commitment (see discussion above). The interaction between working internationally and organizational valence is positive and significant ($\gamma_7 = .22$, $t = 2.87$, $p < 0.01$). H2b is therefore supported. Finally, the interaction

between skill variety and organizational valence is not significant ($\gamma_6 = .00$, $t = .01$, $p > 0.05$).

Hence, H2c is not supported.

DISCUSSION

The broad aim of our study was to explore how managers react to contemporary changes in the nature of their work. Focussing on offshoring as an important present-day context, we investigated how specific offshoring related changes to work characteristics affected onshore managers' affective organizational commitment. Our study thus concords with calls for a more person-focused approach to the study of organizational change made by Choi (2011), Judge, Thoresen, Pucik, and Welbourne (1999), Wanberg and Banas (2000) and others, who critiqued that most literature on organizational change takes a macro, or systems-oriented approach. While understanding organizational change from a macro perspective is significant, an in-depth comprehension of employees' attitudinal responses to changes (including offshore-related changes) is fundamental in order to generate a smooth and effective path to the new way of operating.

To create a foundation for our study, we combined recent insights into offshoring with long-standing evidence on work design. This combination allowed us to single out specific work characteristics (namely job complexity, international working, and skill variety) that are likely to be affected by offshoring, and to hypothesize their relationship with organizational commitment. Drawing on the organizational change literature, we further hypothesized a moderating effect of organizational valence.

The results confirmed the majority of our assumptions. We found that increased job complexity was associated with greater organizational commitment and that such an effect became stronger as the extent to which individuals believed that the offshoring was beneficial for the organization became higher, thus confirming Hypotheses 1a and 2a. Our results also

confirmed Hypothesis 1b and 2b. An increased need to work internationally was associated with higher organizational commitment, and this association was stronger the more individuals perceived offshoring to be beneficial for the organization. Our Hypotheses 1c and 2c were by contrast not supported: Skill variety was not associated with organizational commitment, regardless of the strength of organizational valence.

We interpret these findings as follows. Onshore managers who experienced greater job complexity after offshoring (measured as a particular job characteristic rather than as job enrichment in the broader sense) felt affectively more committed to the organization. Hence, having to ‘multi-task’ to a greater extent and complete more complicated tasks (i.e., greater job complexity after offshoring) appeared to be a welcomed rather than stressful challenge, in line with the original JCM (Hackman, & Oldham, 1980). Motivated by this challenge, onshore managers may have been more willing to exert effort on behalf of the organization and maintain membership in the organization, which are two core components of organizational commitment (Mowday et al., 1979: 226). Moreover, the more individuals at the same time believed that their efforts served a good purpose in that offshoring would be beneficial to the organization (i.e. the greater the organizational valence), the more they were motivated to exert such effort and maintain membership.

Our finding that *working internationally* had a positive association with organizational commitment is particularly interesting in comparison to Nurmi and Hinds’ (2016) observation that global working entails positive outcomes, namely increased job satisfaction, work engagement, and innovative performance. We clearly complement this line of reasoning by demonstrating how working internationally, defined more specifically as coordinating work across national boundaries and dealing with cross cultural differences in work practices and communication styles, also has a positive effect on affective organizational commitment. This is somewhat in contrast to prior observations that intercultural interactions in

international work are a challenge to employees, by requiring high intercultural communication self-efficacy (Zimmermann, & Ravishankar, 2014), causing process losses in multicultural teams (Stahl, Maznevski, Voigt, & Jonsen, 2010) and creating hidden costs in offshoring (Dibbern et al., 2008). In our study, some managers may have experienced international working as a challenge, but overall this work characteristic enhanced rather than hampered managers' organizational commitment. It thus seems that working internationally was an accepted or even welcomed challenge, rather than a distressing challenge.

Our findings on *skill variety* are somewhat puzzling. Whilst managers seemed to respond to new international working requirements by increased organizational commitment, the amount of changes in skill variety per se did not make a difference to managers' organizational commitment. This finding is in contrast to work design research which posits that increased skill variety enhances attitudinal outcomes including organizational commitment (Humphrey et al., 2007). Possibly, this finding is tied to our focus on managerial employees. We can assume that at the managerial level, skill variety is in any case high compared to the skill requirements of blue collar workers, who are the focus of many work design studies. Managers may be more used to developing multiple skills, and a further increase in the range of skill requirements per se may not be relevant to their attitudes towards the organization. In future research, it may therefore be fruitful to explore specific skill requirements and their effects on managers' attitudes, rather than examining only skill variety as such.

With regard to job complexity and international working, our findings clearly support our argument that organizational valence is a moderator of the relationship between offshoring related changes to work characteristics and organizational commitment. This highlights that individuals' are concerned not only about the consequences that organizational changes such as offshoring have directly for themselves, but also whether these changes

benefit the organization. Whilst this idea has been claimed by the literature on 'readiness for change' (Holt et al., 2007) for some while, it has not been included in work design models.

Notably, we also found a very strong (t -value = 5.67) direct association between organizational valence and organizational commitment. We reason that if employees believe that the organization has taken a wise decision in conducting offshoring, and employees hence perceive stronger organizational valence, they are likely to develop a stronger belief in the organization's goals and values, a stronger willingness to exert considerable effort on behalf of the organization, and a stronger desire to maintain membership in the organization - i.e. stronger affective organizational commitment (Mowday et al., 1979: 226). This argument can be supported by Holt et al.'s (2007) finding of a positive relationship between organizational appropriateness - a composite of organizational valence and discrepancy - and affective commitment ($\beta = .26, p < .01$). This finding is also in line with the readiness for change literature which suggests that the employees' readiness for change constitutes a crucial factor for positive attitudinal responses to change (e.g. Choi, 2011).

Research contributions

Our main research contributions are to the areas of work design and offshoring. Recent reviews of the work design literature have called for more insights into the characteristics of modern work, and to take into account today's global work environment (Grant, & Parker, 2009; Oldham, & Hackman, 2010; Parker, 2014). We answer to this call by addressing offshoring as a particular, important context of global working. By demonstrating that offshoring related changes to work characteristics affect individual managers' affective organizational commitment, we highlight that this offshoring context matters, not only to the nature of onshore managers' work, but also to their resultant organizational commitment.

We also contribute to the work design literature by extending and elaborating on the work characteristics defined in prior research. Firstly, we add ‘working internationally’ as a new, contemporary work characteristic. We developed an internally reliable measure of this construct, and demonstrated its relevance to affective organizational commitment. Working internationally covers aspects of work that concern social interactions across country boundaries, in terms of coordinating work across national boundaries and dealing with cross cultural differences in communication styles and work practices. By adding this work characteristic, we therefore answer to appeals for more research on social work characteristics grounded in the argument that ‘jobs, roles, and tasks are more socially embedded than ever before, based on increases in interdependence and interactions ...’ (Grant, & Parker, 2009: 317). To this we add that in a global work context, ‘working internationally’ will be a particularly important social work characteristic.

We also continue previous efforts to treat job complexity as a standalone work characteristic rather than a composite of other job enriching work characteristics (Humphrey et al., 2007). We establish the value of this treatment of job complexity by demonstrating the importance of this variable for affective organizational commitment. With regard to our findings on skill variety, we suggest that at least in certain contexts (such as managerial employees in offshoring settings) skill variety per se is less relevant for attitudinal outcomes than the increase in more specific skills (such as skills related to working internationally). More research is required to substantiate this suggestion.

Our finding that organizational valence moderated the effect of certain work characteristics on organizational commitment deserves special attention, as it demonstrates the value of bringing this construct into work design research. This finding also points to a certain congruence between the organizational change literature and the work design literature. A reason for the prior separation of the research streams may be their different levels of

analysis. Whilst the work design literature focusses to a great extent on the individual level, the organizational change literature is primarily concerned with organizational level changes. There are however calls in the job design literature to take into account the influence of organizational context (Grant, & Parker, 2009; Oldham, & Hackman, 2010), and in the organizational change literature to consider the interaction between organizational level change with individual level consequences (Caldwell, 2013; Vakola, 2013). Our study is a step in this direction, as it combines a view on individual level changes in work characteristics and resultant attitudes with a focus on offshoring as an organizational level influence. Moreover, by including organizational valence as a moderating variable and organizational commitment as an outcome variable, we take into account the role of individuals' considerations about the organization (organizational valence), and attitudes towards the organization (organizational commitment). Our analysis thus incorporates certain interactions between the organizational and individual levels. Our study thereby contributes to a more person-focused examination of organizational change (Choi, 2011; Judge et al., 1999; Wanberg, & Banas, 2000) and confirms the argument made by Weiner (2009) that for an organizational change initiative to be successful, it is significant that employees value this change and they clearly understand the benefits that it can bring.

When looking at offshoring research, we do see some rich evidence on the effect of offshoring on onshore individuals' work (e.g. Zimmermann, & Ravishankar, 2016) and attitudes (Metiu, 2006; Zimmermann et al., 2012, Zimmermann, & Ravishankar, 2011; 2014; 2016). However, this research has not applied the well-developed constructs and measures of work characteristics and readiness for change. By importing these constructs into offshoring research, we are able to compare our offshoring related findings in more detail to the literatures on work design and organizational change, thereby adding to prior findings on

offshoring. In particular, our study suggests that the reactions of onshore employees to increases in job complexity and international working requirements through offshoring may result not only in varied efforts to support the offshoring operation (e.g. Metiu, 2006; Zimmermann, & Ravishankar, 2016), but will also affect individuals' affective organizational commitment, a relationship suggested by the work design literature. Moreover, the variation in employees' reactions to offshoring seem to depend at least in parts on employees' perceptions of organizational valence, a concept taken from the organizational change literature.

Last but not least, we contribute to the call for a more person-focused examination of organizational change (Choi, 2011) and extend our understanding of employees' attitudinal responses to a currently very frequent type of organizational change, namely the one induced by an offshoring initiative.

Practical implications

Academic research has long recognized that the success of change ventures (such as offshoring) depends not only to their content or underlying logic, but also on the processes and actions during their implementation (Armenakis et al., 1993). In this frame, our findings suggest that senior managers who are responsible for designing offshoring operations have to consider carefully how offshoring affects onshore work characteristics. Whilst they can assume that increased job complexity and international working requirements can enhance onshore managers' organizational commitment, they will at the same time have to ensure that employees perceive the organizational benefits of offshoring. This is important for supporting employees' organizational commitment after offshoring. As often stressed in the organizational change readiness literature, organizational change such as offshoring needs to be informed by, and communicated clearly to, employees at all levels. The consequences of

offshoring for individuals' work characteristics need to be made clear (see Caldwell, 2013), and the benefits for the organization need to be explained in detail. Importantly, employees at lower level may experience inefficiencies in their collaboration with offshore sites (e.g. due to additional coordination and intercultural interaction costs, see Dibbern et al., 2008) that higher level managers may not be aware of. A participative approach to designing the offshoring strategy may therefore be valuable, allowing employees to contribute their experience to the design of the strategy, helping to avoid inefficiencies and achieving greater organizational benefits. A participative approach could thereby set the ground for employees' belief in this organizational benefit of offshoring, and would encourage employees to react to increases in job complexity and international working by increased organizational commitment.

For human resource managers and senior managers responsible for designing and defining onshore managers' jobs, and recruiting for these jobs, our study highlights that job complexity and working internationally are desirable work characteristics that are part of high commitment work practices (Huselid, 1995). Skill variety by contrast does not appear to be not part of the high commitment model in the offshoring context, but it is important for senior managers to consider what kind of new skills are designed into the job. The skills of intercultural coordination, communication, and working in particular are likely to be conducive to high employee commitment.

Limitations and future research

Our study has several limitations which set directions for future research. Our sample was restricted to UK managers involved in offshoring of IT services. Whilst the UK is a prime country involved in offshoring, additional factors may come into play in other country contexts. For example, general attitudes towards offshoring may be more negative in the USA,

which could impinge upon resultant organizational commitment. Moreover, non-managerial employees compared to managers may experience other changes to their work characteristics, and may also react to them differently, for example if they are less used to changing skill requirements and attracted less to increased job complexity. Similarly, it is worth exploring whether employees involved in offshoring of other types of services, e.g. financial services, react to changes in work characteristics differently, perhaps due to a different professional culture that embraces job complexity, international working, and skill variety to a greater or lesser extent.

Our findings on changes to work characteristics also need further exploration and consolidation. Previous research has shown that job complexity can have not only positive but also negative consequences such as additional workload (Zimmermann, & Ravishankar, 2016) and stress (Xie, & Johns, 1995). Future research should thus examine whether job complexity after offshoring has negative effects on other employee outcomes such as stress levels and job satisfaction. Our findings on the positive association of job complexity with organizational commitment, and the moderation by organizational valence, also indicate that managers may accept and cope with an additional workload created by job complexity better if they believe this is part and parcel of an offshoring operation that has a good cause, namely benefits the organization.

Our findings regarding working internationally in turn need to be replicated in other studies, as they relied on our new scale. Consolidating this variable is particularly important considering that it reflects an important social aspect of contemporary work. Moreover, our findings on skill variety are somewhat puzzling and need further analysis. It would be useful to explore whether an increase in particular types of skills (rather than skill variety per se) are indeed related to organizational commitment after offshoring, and whether increased skill

variety does make a greater difference to commitment for non-managerial employees, as reasoned above.

Whilst we selected work characteristics that are likely to be affected by offshoring, it is worth exploring how offshoring affects other work characteristics in the JCM. A similarly interesting avenue of research would be to examine effects on other outcomes in the JCM, and in models of reactions to organizational change (Rafferty et al. 2013). Whilst individuals' organizational commitment is paramount for organizations, offshoring may also have consequences for other outcomes such as job satisfaction or individual performance. Moreover, research into other constructs that reflect an employee's readiness for change, for example commitment to change (Herscovitch, & Meyer, 2002), openness to change (Miller, Johnson, & Grau, 1994) or organizational cynicism (Wanous, Reichers, & Austin, 2000) could enhance our understanding of how employees respond to change initiatives such as offshoring. By examining changes to other work characteristics, consequences for other outcomes, and the role of other aspects of readiness for change, research could arrive at a more complete understanding of how managers react to contemporary, offshoring related changes in the nature of their work.

References

- Aiken, Leona, & Stephen G. West 1991. *Multiple Regression: Testing and Interpreting Interactions*. Thousand Oaks, CA: Sage Publications.
- Abramovsky, L., Griffith, R., & Miller, H. 2016. Domestic effects of offshoring high-skilled jobs: Complementarities in knowledge Production. *Review of International Economics*, Early view, DOI:10.1111/roie.12242.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. 1993. Creating readiness for organizational change. *Human Relations*, 46(6): 681-703.

- Aspray, W., Mayadas, F., & Vardi, M. Y. 2006. *Globalizing and offshoring of software: A report from the ACM Job Migration Task Force*. Association for Computing Machinery.
- Baltes, B.B., Dickson, M.W., Sherman, M.P., Bauer, C.C., & LaGanke, J. S. 2002. Computer-mediated communication and group decision making: A meta-analysis. *Organizational Behavior & Human Decision Processes*, 87(1): 156–179.
- Burke, W., & Litwin 1992. A causal model of organizational performance and change. *Journal of Management*, 18(3): 523-545.
- Bidanda, B., Arisoy, O., & Shuman, L. 2006. Offshoring manufacturing: Implications for engineering jobs and education: A survey and case study. *Robotics and Computer-Integrated Manufacturing*, 22: 576–587.
- Caldwell, S.D. 2013. Are Change readiness strategies overrated? A commentary on boundary conditions. *Journal of Change Management*, 13(1): 19-35.
- Chang, S.-J., Witteloostuijn, A., & Eden, L. 2010. 'From the Editors: Common Method Variance in International Business Research,' *Journal of International Business Studies*, 41(2): 178–84.
- Choi, M. 2011. Employees' attitudes toward organizational change: A literature review. *Human Resource Management*, 50(4), 479-500.
- Conner, D.R., & Patterson, R.W. 1982. Building commitment to organizational change. *Training & Development Journal*, 36(4):18-30.
- Conner, D. R. 2006. *Managing at the speed of change: How resilient managers succeed and prosper where others fail*. Random House
- Davis, G., Ein-Dor, P., King, W.R., & Torkzadeh, R. 2006. IT Offshoring: History, Prospects and Challenges. *Journal of the Association for Information Systems*, 7(11): 770-795
- Davis-Blake, A., & Broschak, J. P. 2009. Outsourcing and the changing nature of work. *Annual Review of Sociology*, 35: 321-340.
- Diamantopoulos, A., & Schlegelmilch, B. 2000. *Taking the Fear Out of Data Analysis*. Bournemouth: Thomson Learning.
- Diamantopoulos, A., & Sigauw, J. 2009. *Introducing LISREL*. London: Sage Publications.
- Dibbern, J., Winkler, J., & Heinzl, A. 2008. Explaining variations in client extra costs between software projects offshored to India. *MIS Quarterly*, 32(2): 333–366.
- Elsbach, K.D., & Hargadon, A.B. 2006. Enhancing creativity through 'mindless' work: A framework of workday design. *Organization Science*, 17(4), 470–483.

- Fedor, D.B., Caldwell, S., & Herold, D.M. 2006. The effects of organisational changes on employee commitment: A multilevel investigation. *Personnel Psychology*, 59(1): 1-29.
- Goos, M., Manning, A., & Salomons, A. 2014. Explaining Job Polarization: Routine-Biased Technological Change and Offshoring. *American Economic Review*, 104(8): 2509–2526.
- Grant, A.M., & Parker, S.K. 2009. Redesigning Work Design Theories: The Rise of Relational and Proactive Perspectives. *The Academy of Management Annals*, 3(1): 317-375.
- Hackman, J. R., & Oldham, G. R. 1975. Development of the job diagnostic survey. *Journal of Applied Psychology*, 60: 159–170.
- Hackman, J.R., & Oldham, G.R. 1980. *Work Redesign*. Reading, MA: Addison-Wesley.
- Harrison, A. E., & McMillan, M. S. 2006. Dispelling some myths about offshoring. *Academy of Management Perspectives*, 20(4): 6–22.
- Hartline, M., Maxham, J., & McKee, D. 2000. Corridors of influence in the dissemination of customer-oriented strategy to customer contact service employees. *Journal of Marketing*, 64(2): 35-50.
- Herscovitch, L., & Meyer, J. P. 2002. Commitment to organizational change: extension of a three-component model. *Journal of Applied Psychology*, 87(3), 474-487.
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. 2007. Readiness for organizational change: The systematic development of a scale. *Journal of Applied Behavioral Science*, 43(2): 232-255.
- Humphrey, S.E., Nahrgang, J.D., & Morgeson, F.P. 2007. Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92:1332–56
- Huselid, M.A. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3): 635–672.
- Jaccard, J., & Wan, C.K. 1996. *LISREL Approaches to Interaction Effects in Multiple Regression*. Thousand Oaks, CA: Sage Publications.
- Joo, B.-K., & Lim, T. 2009. The Effects of Organizational Learning Culture, Perceived Job Complexity, and Proactive Personality on Organizational Commitment and Intrinsic Motivation. *Journal of Leadership & Organizational Studies*, 16(1): 48-60.
- Jöreskog, K., & Sörbom, D. 1993. *LISREL 8: Structural Equation Modelling with the SIMPLIS Command Language*. NJ: Scientific Software International.

- Jöreskog, K., & Sörbom, D. 2007. **LISREL 8.80**. Lincolnwood, IL: Scientific Software International, Inc.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. 1999. Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84(1): 107-122.
- Kam, C.K., & Franzese R.J. 2007. **Modelling and Interpreting Interaction Hypotheses in Regression Analysis**. MI: The University of Michigan Press.
- Mankiw, N.G., & Swagel, P. 2006). The politics and economics of offshore outsourcing. **NBER Working Paper 12389**, July.
- Metiu, A. 2006. Owning the code: status closure in distributed groups. *Organization Science*, 17: 418–435.
- Meyer, J.P., & Allen, N.J. 1991. A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1): 61-89.
- Meyer, J.P., Stanley, D.J., Herscovitch, L., & Topolnytsky, L. 2002. Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1): 20–52
- Miller, V. D., Johnson, J. R., & Grau, J. 1994. Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22(1): 59–80.
- Morgeson, F.P., & Humphrey, S.E. 2006. The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6): 1321.
- Morrow, P.C. 2011. Managing organizational commitment: Insights from longitudinal research. *Journal of Vocational Behavior*, 79(1): 18–35
- Mowday, R.T., Steers, R.M., & Porter, L.W. 1976. The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2): 224-247.
- Nurmi, N., & Hinds, P.J. 2016. Job complexity and learning opportunities: A silver lining in the design of global virtual work. *Journal of International Business Studies*, 47(6): 631-654.
- Oldham, G.R. , & Hackman, J.R. 2010. Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31(2-3): 463-479.
- Ottaviano, G.I.P., Peri, G., & Wright, G.C. 2013. Immigration, Offshoring, and American Jobs. *American Economic Review*, 103(5): 1925-1959.

- Palmatier, R. W. 2016, 'Improving Publishing Success at JAMS: Contribution and Positioning', *Journal of the Academy of Marketing Science*, 44 (6), 655-59.
- Parker, S.K. 2014. Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology*, 65:15.1–15.31.
- Pentareddy, S., & Suganthi, L. 2015. Building affective commitment through job characteristics, leadership and empowerment. *Journal of Management & Organization*, 21(3): 307–320.
- Ping, R.A. 1995. A Parsimonious Estimating Technique for Interaction and Quadratic Latent Variables. *Journal of Marketing Research*, 32: 336–47.
- Rafferty, A.E., Jimmieson, N.L., & Armenakis, A.A. 2013. Change readiness: A multilevel review. *Journal of Management*, 39(1): 110-135.
- Robert-Nicaud, F. 2008. Offshoring of routine tasks and (de)industrialization: Threat or opportunity - and for whom? *Journal of Urban Economics*, 63: 517–535.
- Stahl, G., Maznevski, M.L., Voigt, A., & Jonsen, K. 2010. Unravelling the effects of cultural diversity in teams: a meta-analysis of research on multicultural work groups. *Journal of International Business Studies*, 41(4): 690-709.
- United Nations 2005. World Investment Report, Transnational Corporations and the Internationalization of R&D. *United Nations conference on trade and development*, New York and Geneva.
- Vakola, M. 2013. Multilevel readiness to organizational change: A conceptual approach. *Journal of Change Management*, 13(1): 96-109.
- Wanberg, C. R., & Banas, J. T. 2000. Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85(1), 132-142.
- Wanous, J. P., Reichers, A. E., & Austin, J. T. 2000. Cynicism about organizational change: Measurement, antecedents, and correlates. *Group & Organization Management*, 25(2): 132–153.
- Weiner, B. J. 2009. A theory of organizational readiness for change. *Implementation Science*, 4(67): doi:10.1186/1748-5908-4-67.
- Welsch, H., & Lavan, H. 1981. Interrelations between organizational commitment and job characteristics, job satisfaction, professional behaviour, and organizational climate. *Human Relations*, 34(12): 1079-1089.
- Wright, T. A., & Bonett, D. G. 2002. The moderating effects of employee tenure on the relation between organizational commitment and job performance: a meta-analysis. *Journal of Applied Psychology*, 87(6): 1183-1190.

- Xie, J.L., & Johns, G. 1995. Job scope and stress: Can job scope be too high? *Academy of Management Journal*, 38(5): 1288–1309.
- Zimmermann, A., & Ravishankar, M.N. 2011. Collaborative IT offshoring relationships and professional role identities: Reflections from a field study. *Journal of Vocational Behavior*, 78(3): 351–360.
- Zimmermann, A., Raab, K., & Zanotelli, L. 2012. Vicious and virtuous circles of offshoring attitudes and relational behaviours. A configurational study of German IT developers. *Information Systems Journal*, 23(1): 65–88.
- Zimmermann, A., & Ravishankar, M.N. 2014. Knowledge transfer in IT offshoring relationships: The roles of social capital, efficacy, and outcome expectations. *Information Systems Journal*, 24(3): 167-202.
- Zimmermann, A., & Ravishankar, M.N. 2016. A systems perspective on offshoring strategy and motivational drivers amongst onshore and offshore employees. *Journal of World Business*, 51(4): 548–567.

Table 1. Model Fit Indicators, Correlation Matrix, and Measurement Scale Properties

Model	χ^2 (d.f.)	<i>p</i> -value	$\Delta\chi^2$ (d.f.)	RMSEA	CFI	NFI	NNFI
Measurement model	180.15 (109)	.00	-	.07	.97	.92	.96
Structural models							
- Model 1 (constrained model) ^a	72.64 (50)	.02	-	.05	.96	.92	.88
- Model 2 (unconstrained model) ^b	61.93 (47)	.07	10.71(3) ^c	.05	.98	.93	.91
Measures	1	2	3	4	5		
1. Organizational commitment	-						
2. Job complexity	-.25*	-					
3. Skill variety	.50**	-.03	-				
4. Working internationally	.31**	.04	.24*	-			
5. Organizational valence	.74**	-.29**	.44**	.13	-		
Mean	3.73	3.01	3.63	4.13	3.62		
Standard deviation	.87	1.13	.90	.77	.91		
Composite reliability	.87	.86	.84	.82	.85		
Average variance extracted	.62	.67	.63	.61	.59		
* Correlation is significant at the .05 level.							
** Correlation is significant at the .01 level.							
a Squared multiple correlation coefficient = .68							
b Squared multiple correlation coefficient = .74.							

Table 2. Structural Coefficients and T-values

Parameter Estimates and t-Values^a				
Hypotheses Supported by Path			Standardized Estimates	t-Values
H _{1a}	Y ₁	Job complexity	.03	.36
H _{1b}	Y ₂	Working internationally	.22	3.00
H _{1c}	Y ₃	Skill variety	.12	1.38
H _{1d}	Y ₄	Organizational valence	.58	5.67
H _{2a}	Y ₅	Job complexity x Organizational valence	.14	1.99
H _{2b}	Y ₆	Working internationally x Organizational valence	.22	2.87
H _{2c}	Y ₇	Skill variety x Organizational valence	.00	.01
Controls				
	Y ₈	Industry (Finance)	-.22	-2.80
	Y ₉	Industry (Retail)	-.03	-.40
	Y ₁₀	Industry (Manufacturing)	.07	.97
	Y ₁₁	Industry (IT)	.03	.48
	Y ₁₂	Tenure (less than 1 year)	-.07	-1.15
	Y ₁₃	Tenure (1 to 3 years)	-.04	-.70
	Y ₁₄	Recency of offshoring (less than 1 year)	.08	1.23
	Y ₁₅	Recency of offshoring (1 to 3 years)	.03	.41

^a Critical t-value (5%, one-tailed) = 1.65; critical t-value (1%, one-tailed) = 2.33.