

# **Work engagement, job design and the role of the social context at work: Exploring antecedents from a relational perspective**

## **Abstract**

Relational resources are now recognised as significant factors in workplaces and increasing attention is being given to the motivational impact of giving in addition to receiving social support. Our study builds on this work to determine the role of such relational mechanisms in work engagement, a concept that simultaneously captures drive and well-being. Data from 182 midwives from two maternity hospitals revealed a best-fit model where perceived supervisor support, social support from peers, prosocial impact on others and autonomy explained 52% of variance in work engagement. Perceived prosocial impact acted as a significant partial mediator between autonomy and work engagement. This study provides evidence for the importance of perceived prosocial impact and the role of immediate supervisors in facilitating work engagement in midwifery. Results highlight the value of relational resources and suggest their explicit inclusion in current models of work engagement.

**Keywords;** work engagement, job design, relational perspective, supervisor, job resources.

## **Introduction**

Work engagement is a persistent, positive, affective-motivational state of fulfilment in employees that is characterised by energy, dedication and absorption (Schaufeli and Bakker, 2004).

Proponents argue that, through increased work engagement, organisations flourish and employees experience greater vitality even under increased work intensification (Bakker, Hakanen, Demerouti and Xanthopoulou, 2007). Work engagement is heralded as an experience that enables employees to meet and exceed their goals and to contribute to organisational success while

simultaneously maintaining their personal well-being (*e.g.* Bakker *et al.*, 2007). Yet, questions regarding its antecedents continue to command research attention. Studies on work engagement have identified a range of job resources such as autonomy and feedback as well as personal resources such as self-efficacy that may serve as important facilitators of this motivational process (Mauno, Kinnunen, and Ruokolainen, 2007; Xanthopoulou, Bakker, Demerouti, and Schaufeli, 2009), in particular when job demands are high (Bakker *et al.*, 2007). Research also highlights the potential importance of the relationship an employee has with peers and supervisors for the work engagement process (*e.g.*, Xanthopoulou, Bakker, Heuven, Demerouti and Schaufeli, 2008).

To date, research into predictors of work engagement has focussed almost exclusively on the role of job resources. Such factors have also been extensively discussed in the literature on job design. The main theory in this field, Hackman and Oldham's (1980) job characteristics model (JCM), explains the impact of job characteristics (skill variety, task identity, task significance, autonomy and feedback) through motivational and psychological dynamics. Yet in line with most of the traditional job design literature, the JCM relegates social factors to the role of boundary conditions and contingency factors and neglects social aspects of the work context (Humphrey, Nahrgang and Morgeson, 2007). Recent work on relational approaches to job design (*e.g.*, Grant, 2007, 2008), however, has focused attention on the importance of the social context of work (*i.e.*, "interpersonal interactions and relationships that are embedded in and influenced by the jobs, roles, and tasks that employees perform and enact"; Grant and Parker, 2009: 322).

The present study among midwives is rooted in the Job Demands-Resources Model (JDR) and informed by relational approaches to job design, and focuses on the role of social resources in facilitating work engagement. Specifically, we consider the impact on work engagement of midwives' supervisor support, social support from peers, and the perceived prosocial impact of

their work on others. This examination of the contribution of social dimensions on work engagement addresses theoretical gaps by investigating the role of social factors for work engagement. The research results can inform the deliberate integration of relational mechanisms into work settings to increase work engagement.

## **Theoretical perspectives**

### *Work Engagement and the Job Demands-Resources Model*

Work engagement theory provides a lens that helps focus on positive aspects of workplaces and on factors that can foster employee happiness and well-being. Research that establishes empirical links between work engagement and performance is also emerging (*e.g.*, Bakker & Bal, 2010; Xanthopoulou, Bakker, Demerouti and Schaufeli, 2007, 2009). Work engagement processes are explained by the widely-used Job Demands-Resources Model (JDR; Bakker and Demerouti, 2007) which assumes that all occupations have particular sets of job demands (*i.e.*, aspects of a job that require physiological, cognitive or emotional effort such as demanding tasks, physical danger, or emotional labour) and job resources (*i.e.*, aspects of a job that enable goal achievement, help to manage job demands; or contribute to growth). According to the JDR model, the balance between resources and demands is critical to the experience of work engagement (Bakker and Demerouti, 2007). The JDR posits two central psychological processes; one related to well-being in that job demands contribute to job strain, the other motivational in nature in that job resources have motivational properties. Job demands and resources interact in that resources can moderate the impact of demands on experienced job strain, while similarly job demands can affect the positive impact of resources on motivation (Bakker and Demerouti, 2007).

According to the JD-R model (Bakker & Demerouti, 2007), job resources are the main initiators of employees' work engagement through motivational processes while job demands are

more relevant through a health impairment path. In line with the study population and setting, this study focuses on the motivational process and the role of job resources because the uniformly high work intensity of hospital-based midwives in the study sites (KPMG, 2008) causes restricted variance in many relevant job demands. Job resources include, inter alia, performance feedback, autonomy, task significance, and social and supervisor support (Demerouti *et al.*, 2001). Salient job resources vary according to individual differences and the type of work (Demerouti *et al.*, 2001), but the overall role of such resources has received considerable support in the literature (Bakker and Demerouti, 2007). Job resources predict work engagement, particularly when confronted with high job demands, with resources functioning as buffers against sources of strain at work (Bakker *et al.*, 2007). Nevertheless, the relationship between job resources and work engagement is not entirely clear-cut. A study with healthcare workers found job resources to be more important for work engagement than were job demands although only some (*i.e.*, job control, job insecurity) acted as significant lagged predictors of the dedication facet of work engagement (Mauno *et al.*, 2007). This may be explained by the stable nature of work engagement (Mauno *et al.*, 2007; Hakanen, Perhoniemi and Toppinen-Tanner, 2008), which may suggest a trait element to work engagement. However, it is also possible that research has not yet identified the most critical resources required in facilitating work engagement.

Social support helps individuals to deal with the demands of their work, thus preventing strain due to overload (Ray & Miller, 1994) as well as exhaustion (Halbesleben, 2006). Among flight attendants, Xanthopoulou and colleagues (2008) found that work engagement fully mediated the relationship between social support and in-role performance. Similarly, supervisor support plays a crucial role in work engagement and was especially important for teachers coping with demanding interactions with students (Bakker *et al.*, 2007).

The impact of social resources has also been investigated by the emerging relational perspectives on job design which argues that social interactions and relationships are crucial for motivation (Grant, 2007) as well as coordination of work (Grant & Parker, 2009). Relational perspectives of job design offer distinct insights into motivational processes at work. The “relational architecture of jobs” (Grant, 2007: 396) provides direction and impetus to particular employee behaviours such as the motivation to make a prosocial difference to the lives of others (Grant, 2007). Experimental work supports the claim that prosocial task significance contributes to performance as well as job dedication. Thus, social and relational factors can facilitate motivation and work engagement by highlighting the social impact of work.

Prosocial contributions through work increase the experience of positive emotions (*e.g.*, Batson, 1994) and contribute to intrinsic motivation and thus facilitate work engagement. Perceived prosocial impact can protect against emotional exhaustion and compensate for low intrinsic motivation and core self-evaluations in predicting performance (Grant and Sonnentag, 2010). Conversely, a considerable body of evidence points to the destructive impact of negative social interactions and anti-social behaviour in workplaces (Cortina & Magley, 2009). Workplace incivility (Andersson & Pearson, 1999), for instance, is linked to increased chronic stress (Cortina & Magley, 2009) and burnout for those at the receiving end (Leiter, Laschinger, Day & Gilin-Oore, 2011). In light of these findings and in line with relational perspectives of job design, the present study focuses on positive social interactions and their contribution to work engagement.

#### *Researching the social dimension of work engagement in Midwifery*

Contrary to burnout, work engagement has not been extensively researched in nursing and midwifery and is still inadequately understood in such populations (Freeney and Tiernan, 2009; Simpson, 2009). Investigations into work engagement among midwives appear particularly

worthwhile in light of evidence that engaged midwives are willing to do whatever needs to be done, radiate energy, and inspire and keep up spirits on the wards, particularly during low morale periods (Engelbrecht, 2006). In terms of antecedents to work engagement in nursing, Freeney and Tiernan (2009) found that facilitators and barriers to work engagement involve the six key areas of organisational life originally outlined by Maslach and Leiter (1997) including challenging yet manageable workloads, autonomy, recognition and reward, fair treatment, support, and value congruence. In addition, Simpson (2009) found that opportunities for social and professional contact during working hours were predictive of work engagement for nurses.

Hospital-based midwifery offers a highly useful context for studying the role of relational resources for work engagement. The high level of work intensity, the needs of patients, the complexity of professional interactions, requirements for effective coordination and the resulting importance of relationships with peers, supervisors and patients are central for the work done by such midwives. Also, even though many midwives are trained to be and consider themselves relatively autonomous clinical practitioners; supervisors, peers and other health care professionals play an important part in their work. Similarly, prosocial values are an integral part of the professional identity of midwives based on their training and socialisation, the ethos of the profession, and the values of the hospitals in which they work. Concurrently, midwifery staff levels in the study hospitals were significantly lower than international best practice guidelines and data published by all relevant maternity hospitals in the study region show further decreasing staff levels, despite significant (>20%) increases in numbers of births in the study hospitals since the KPMG study (2008). Thus, the study setting is characterised by very high work intensity, and by an organisational and task environment that allows the investigation of social and relational factors and their impact on work engagement.

## Hypotheses

The present study focuses exclusively on the motivational process rather than the health impairment process of the JDR model to investigate the relevance of social and relational resources for work engagement. The high levels of work intensity and the uniformly high job demands in the study setting precludes a comprehensive assessment of both job resources and job demands due to restricted variance in many relevant demand variables. Despite this restriction, the high pressure work environment provides an ideal setting for studying the potential benefits of the selected social and relational resources. [FIGURE 1 ABOUT HERE]

First, we set out to confirm predictors of work engagement in the work environment of midwives. We then focus on identifying the contribution of relational resources to work engagement. Specifically, the study examines the roles of social and supervisor support as well as the role of perceived prosocial impact of one's work on others in the experience of work engagement. Since task significance is considered a resource within the JDR model (Demerouti *et al.*, 2001), perceived prosocial impact as one element of perceived task significance is treated here as a relevant job resource. In human service settings, perceived prosocial impact is directly experienced in the context of interactions with clients and patients. For this reason, we include it along with social support and supervisor support among the relational resources investigated here. To our knowledge, the inclusion of perceived prosocial impact with social support variables has not yet been studied simultaneously and comparatively. The expected relationships between the variables are represented in the model in Figure 1. The rationale for their inclusion is detailed here.

Research on the JDR model recognises the importance of autonomy as one important job resource in predicting work engagement (Bakker & Demerouti, 2007; Mauno *et al.*, 2007). Within midwifery, professional autonomy is of growing importance (MacDonald, 2002) and is recognised

as important in facilitating work engagement (Freeneay & Tiernan, 2009), while a lack of autonomy is linked to higher levels of stress (Mackin & Sinclair, 2008). Thus,

*Hypothesis 1:* Autonomy will be a significant positive predictor of midwives' work engagement.

As an extension of the JDR model and in line with the theory and empirical evidence emerging from the relational approach to work design, we predicted that relational job resources would make unique and identifiable contributions to work engagement. The impact of the social context on motivation has been somewhat neglected in the work design literature (Humphrey *et al.*, 2007) and research on predictors of work engagement has not focused any special attention on social factors. Social factors are important determinants of well-being as well as sources of energy, enthusiasm and positive affect (*e.g.*, Watson, 2000). Thus, social aspects of work should have the capacity to contribute significantly to work engagement. Existing research supports the relationships between perceived support from significant others (*i.e.*, supervisors, colleagues) with work engagement (see Bakker & Demerouti, 2007). Therefore,

*Hypothesis 2:* Work engagement will be significantly and positively predicted by perceived (a) supervisor support and (b) social support.

There is no available empirical evidence regarding the role of prosocial motivation for work engagement. In line with findings about the significance of prosocial motivation in contemporary work environments (Grant, 2007), we expect that perceived prosocial impact of one's work acts as a job resource and predicts work engagement. Grant's work on prosocial motivation marks a significant shift in the literature on work design by incorporating the role of giving to others as a key driver of work attitudes and outcomes, and through its impact on intrinsic motivation bears important implications for work engagement. Hence,

*Hypothesis 3:* The perceived prosocial impact of work is a positive predictor of work engagement.



Beyond their direct relationships with work engagement, we believe there is evidence to suggest that autonomy and perceived prosocial impact may combine in a unique way to foster work engagement. In the JCM model of work design the experienced meaningfulness of a job acts as the primary mediator of the job characteristics-outcome relationship (Humphrey *et al.*, 2007). Analogous to this we argue that perceived prosocial impact of one's work, as a proxy for experienced meaningfulness, mediates the relationship between autonomy and work engagement. Similarly, Person-Environment Fit theory (Edwards, 2008), which discusses the congruence between individual needs and environmental rewards also suggest a potential mediation. Bakker, Albrecht and Leiter (2011) argue that engaged employees strive for congruence with their work environment in terms of needs and abilities, and work is experienced as more meaningful when it involves the pursuit of valued goals (Ryff and Singer, 1998). Given the role of patient care in the socialisation and professional values of midwives, autonomy and flexibility in pursuing patient welfare is of paramount importance. Moreover, from a pragmatic perspective, autonomy may facilitate the amount of time midwives can spend caring for patients as they can decide what they focus on and how they exercise their job responsibilities. Such job crafting (Wrzesniewski & Dutton, 2001) likely leads to value congruent work enactment, and the resulting increase in contact time and quality (*e.g.*, Berg, Dutton & Wresniewski, 2007) with service beneficiaries may amplify the perceived prosocial impact of their work (see Grant, 2007), and in turn lead to increased work engagement. Consequently:

*Hypothesis 4:* Perceived prosocial impact of work will mediate the relationship between autonomy and work engagement.

## **Method**

### *Participants and procedure*

Data were collected from midwives working in two large Irish maternity hospitals. In one hospital, questionnaires in anonymous envelopes were distributed centrally through the hospital administration, while in the other, questionnaires were distributed by the researchers who visited all wards to invite potential participants. Participants could return questionnaires directly using return envelopes or to secure collection boxes located throughout both hospitals. The researchers called to the wards to collect completed questionnaires from the collection boxes, to remind staff about the voluntary study, and to address any questions. Each of the wards was visited equally and included at least one night shift visit. In total, 182 usable questionnaires were returned which represents a response of 35% of the total midwifery staff in these hospitals. Questionnaires with missing data ( $n=7$ ; 3.8%) were removed to allow bootstrapping analyses of the remaining 175 cases through AMOS. Participant demographics (age 21 to 65 years) did not differ significantly from the total population of midwives practicing in the region and the study hospitals (sample vs. population: 95% vs. 98.5% female) although the sample consisted of a lower proportion of staff midwives (55% vs. 62%) and a higher proportion of nurse managers (31% vs. 23%) (Nursing Board, 2010). Other participants included senior nurse managers (6%), student midwives (5%) and advanced practitioners/specialists (3%). Overall, the sample has a slightly greater proportion of both early career (less than 30 years of age) and more senior nurses than the total staff population in the participating hospitals.

### *Measures*

*Work Engagement* was assessed with the Utrecht Work Engagement Scale (UWES; Schaufeli, Salanova, Gonzalez-Roma and Bakker, 2002), the most commonly utilised scale in the literature which has well-established psychometric properties (*e.g.*, Seppälä *et al.*, 2009). In line with some recent empirical work (*e.g.*, Demerouti, Mostert & Bakker, 2010) and in line with the nature of

midwifery work (see Tuckey, Bakker and Dollard (2012) for a similar argument in relation to their research on firefighters), we operationalized work engagement by using the ‘Core Engagement’ elements which include the vigour and dedication subscales of the UWES. Sample items from the included subscales are “At work I feel bursting with energy” (vigour) and “My job inspires me” (dedication). All items were scored on a seven-point scale anchored with “never” (0) to “every day” (6). (Reliability indicators (Cronbach’s alpha) for all scales are available in Table 1).

*Perceived Prosocial Impact* was assessed using a 4-item version of Grant’s (2008) prosocial impact scale which measures the extent to which respondents feel that their work helps or benefits others. For research with midwives we modified the scale by replacing ‘other people’ with ‘patients’ (e.g., ‘I am very conscious of the positive impact that my work has on patients’). A seven-point Likert scale anchored at 1 = strongly disagree and 7 = strongly agree was used as in the original scale.

*Social Support* was measured using the two most relevant subscales of Cutrona and Russell’s (1987) social provisions scale with eight items in total. Sample items include ‘There are colleagues I can depend on to help me if I really need it’ (*Reliable Alliance*), and ‘There is no one I can turn to for guidance in times of stress’ ([R], *Guidance*). Previous studies have confirmed the reliability and validity of the social provisions scale (Cutrona and Russell, 1987). The scale was anchored at 1 = strongly disagree and 4 = strongly agree.

*Supervisor Support* Consistent with Eisenberger, Stinglhamber, Vandenberghe, Sucharski and Rhoades (2002), eight adapted items from the Perceived Organizational Support (POS) scale were used after replacing the word *organisation* with *supervisor*. A sample item is ‘My supervisor really cares about my well-being’. A seven-point Likert scale anchored at 1 = strongly disagree and 7 = strongly agree was used.

*Autonomy* was measured using three subscales from Morgeson and Humphrey's (2006) work design questionnaire aimed at three distinct types of autonomy. Sample items are 'The job allows me to make a lot of decisions on my own' (*decision-making*), 'The job allows me to plan how I do my work' (*work scheduling*), and 'The job allows me to decide on my own how to go about doing my work' (*work methods*). A five-point Likert scale anchored at 1 = strongly disagree and 5 = strongly agree was used.

*Demographics* In addition to these study variables we collected demographic data including sex, age (in range brackets), national origin, position, and years of work experience. Overall, the scales varied in terms of number of anchor points and anchor response terms, two procedural remedies that are suggested for alleviating common method bias (Podsakoff, MacKenzie & Podsakoff, 2012).

*Data Analyses* We subjected all variables to a confirmatory factor analysis to test for significant overlap among them. We then tested the self-report data for common method variance using the procedure recommended by Podsakoff and colleagues (2012) and employed the confirmatory factor analysis (CFA) marker technique for mitigating common-method variance (Richardson *et al.*, 2009). The items representing the latent variables were entered into an unrotated exploratory factor analysis with a forced one-factor solution. Data that fit such one-factor solutions indicate the possible presence of common method variance (Podsakoff *et al.*, 2012). The model in Figure 1 was tested in three steps with structural equation modelling (SEM) analyses. To test the fit of the alternative non-mediation and mediation models, the customary chi-square, comparative fit index (CFI) and root mean square error of approximation (RMSEA) were assessed. For CFI, values of .90 are acceptable and of .95 or higher are indicative of good fit (Hu and Bentler, 1999). For RMSEA, values of .05 or lower indicate good fit and values up to .08

represent reasonable errors of approximation (Browne and Cudeck, 1993). We employed the increasingly popular method of testing indirect effects, bootstrapping, to test the significance of any potential mediating role of perceived prosocial impact (Shrout and Bolger, 2002).

In testing the theoretical model, the latent exogenous factors of autonomy and social support were each operationalised by two observed variables, respectively (with subscales used as observed indicators). The model included work engagement (consisting of vigour and dedication) as an endogenous latent variable. The perceived prosocial impact and supervisor support measures had no subscales. After exploratory factor analyses indicated one-factor solutions for each, we resorted to item parcelling to create two latent variable indicators for each variable to preserve parsimony and facilitate SEM for smaller sample sizes (Bandalos and Finney, 2001).

## **Results**

### *Descriptive Statistics*

Table 1 presents the means, reliabilities and correlations among the latent variables and the indicator variables. [TABLE 1 ABOUT HERE]

### *Confirmatory Factor Analysis and Common method variance*

First, confirmatory factor analysis was implemented to confirm that the variables were distinct. The resulting CFA analysis supported the treatment of the variables as distinct factors ( $\chi^2(419) = 738.98$ ,  $p = .000$ , CFI = .918; RMSEA = .066). Second, we tested for common method variance. The unrotated one-factor principal axis analysis revealed that only 34% of variance was accounted for by this single factor, indicating no significant general factor. Similarly, the confirmatory factor analysis showed that the single-factor model did not fit the data particularly well ( $\chi^2(418) = 977.4$ ,  $p = .000$ , CFI = .85; RMSEA = .09). Squared regression estimates indicated that common variance was about 14.5%. Furthermore, using the CFA marker technique, an additional marker variable

(distributive justice) was added to the CFA analysis. Following this analysis, the common variance dropped slightly to 13.7%. These results suggest that common method variance is not of substantial concern in the study data.

#### *Test of the hypothesised model*

First, we tested the research model reflecting the motivational path of the JDR model of work engagement without any indirect effects. This model studied the direct effects of job resources (autonomy, supervisor support, social support, perceived prosocial impact) on work engagement and demonstrated a very good fit to the data ( $\chi^2 (37) = 71.7$ ,  $p < 0.01$ , CFI=.97, RMSEA = .07). The modelled variables explained 49% of the variance in work engagement. Thus, the findings confirm the relationship between autonomy and work engagement, supporting Hypothesis 1. This model also supports the hypothesised relationships between supervisor support (H2a) and perceived prosocial impact (H3) and work engagement, respectively. However, the data did not support the predicted relationship between social support and work engagement (H2b)

We added the indirect path from autonomy to work engagement through perceived prosocial impact to test for the predicted mediation. This model demonstrated an excellent fit to the data ( $\chi^2 (36) = 63.2$ ,  $p = .03$ , CFI=.98, RMSEA = .06), but the direct effect of autonomy on work engagement remained significant which indicates that the predicted full mediation by perceived prosocial impact was not supported (H4). However, the indirect effect was significant, the model shows a significant improvement over the unmediated model ( $\chi^2 \Delta (1) = 8.5$ ,  $p < .05$ ), and the explained variance in work engagement increased to 52%. Bootstrapping analysis with 1000 bootstrap samples further confirmed the significance of the indirect effect of perceived prosocial impact between autonomy and work engagement with an estimated indirect effect  $\alpha\beta$  of prosocial impact on change in work engagement of 0.07. As the 95% bias-corrected confidence

interval did not contain zero (95% CI 0.03 – 0.15), the partial mediation was supported. The best-fit model includes this partial mediation effect and is displayed in Figure 2. [FIGURE 2 ABOUT HERE]

## **Discussion**

In this study we examined the impact of relational resources on work engagement in the under-researched profession of midwifery. The theoretical framework guiding this research was the JDR model of work engagement complemented by evidence and arguments from relational perspectives on job design (*e.g.*, Grant, 2007). We hypothesized that, in addition to the most important structural job resource, autonomy (H1), social support from supervisors and peers (H2a & b) and the participants' prosocial motivation, operationalized here as perceived prosocial impact of their work (H3), would predict work engagement. We also hypothesised that perceived prosocial impact of work fully mediates the relationship between autonomy and work engagement (H4). The results supported the important role of autonomy in predicting work engagement in the studied midwives. Similarly, the results broadly supported the important relationship between relational resources such as supervisor support (H2a) and perceived prosocial impact (H3), respectively. Curiously, the predicted relationship between social support and work engagement (H2b) was not supported in this study. This element notwithstanding, the results are broadly in line with existing evidence in the work engagement literature (*e.g.*, Demerouti *et al.*, 2001; Xanthopoulou *et al.*, 2007) as well as with evidence derived from relational approaches to work design (*e.g.*, Grant, 2007, 2008). The data did not support the predicted full mediation by perceived prosocial impact of the effect of autonomy on work engagement, but analyses revealed a significant partial mediation.

*Theoretical contribution to the integration of relational resources in the JDR*

This research provides empirical support for the role and importance of relational mechanisms in the motivational processes related to work engagement, and informs explanations about their contribution to the experience of meaningfulness of work. We tested the indirect path to clarify the nature of the relationships between job resources (*i.e.*, autonomy), relational resources (*i.e.*, prosocial impact) and work engagement. Work by Humphrey *et al.* (2007) has highlighted the importance of experienced meaning for positive work outcomes. Moreover, employees experience greater meaning in their work when they strive for valued goals (Ryff & Singer, 1998). While our findings are cross-sectional in nature, the results are in line with the argument that, particularly for professionals in human service contexts, autonomy alone is not sufficient in driving work engagement. Rather, such employees must also be able to utilise this resource to pursue work they deem meaningful and in ways that are congruent with their values. In the case of the midwives in the present study, this meaningfulness is achieved through having a positive impact on their patients. Thus, in line with suggested modifications to the JCM model (Humphrey *et al.*, 2007) that acknowledge the unique role of experienced meaning, the findings suggest an extension of the JD-R model because it is not sufficient to view job resources solely as inputs into processes of work engagement. The model must more explicitly recognise the simultaneous impact of available social and relational resources on individual value orientations and experiences, and incorporate their separate and joint effects on motivation and work engagement.

To further highlight this point, the suggested inclusion of interactions between job resources and relational resources in the JDR model is important because relational resources may motivate individuals to invest job and personal resources in particular ways in pursuit of work goals. The study data is fully consistent with the argument that relational resources available to the midwives are likely to have induced them to invest additional effort in providing prosocial



services, thus creating an amplifying condition for in-role behaviour through the alignment of work tasks and professional and/or individual values. This insight into how the availability of relational job resources may influence subsequent resource deployment in value congruent ways should be integrated in the specification of motivational processes in the JDR model.

Contrary to much of the literature, social support did not predict work engagement for the midwives in this study. The link between these variables was ambiguous, contradicting reports of significant links between social support and work engagement (*e.g.*, Demerouti *et al.*, 2001). Recent research outside of the work engagement literature also failed to demonstrate the positive benefits of social support for nurses in that it was neither linked to positive affect nor protected against effects of serious clinical incidents (Jones and Johnston, 2012). Within the work engagement literature, Bakker and Bal (2010) reported no link between social support and work engagement in a sample of mostly female teachers (> 90%). Vermeulen and Mustard (2000) noted that social support appeared to be more important for women when it came to mitigating negative aspects of work. Thus, social support may only play a role in work engagement for women in moderating the effects of high strain. An explanation for the insignificant role of social support may also lie in the way in which the studied midwives work. Compared to many other hospital-based nursing specialties they operate as rather independent clinicians, and social support from peers may not play the same role for them. Further research that examines resources and demands simultaneously is required to verify these conjectures.

### *Practical Implications*

The findings from this study bring valuable practical implications for health and human services but may also offer broader insights relevant in the service sector where social relationships among colleagues and with service users is important. In line with relational perspectives of job design,

the present study highlighted the important role of the perceived impact of employees' work on end-users for employee motivation. More frequent and meaningful interactions with service recipients may have intrinsically motivating properties, especially in contexts where pro-social values are espoused in the workplace and supported by professional socialisation. This can be enhanced through increased frequency, duration, physical proximity, depth, and breadth of contact with service takers (*e.g.*, patients, clients, customers). Changes to practice framed in such pro-social terms, with a clear focus on service user benefits, have an increased likelihood of being accepted and implemented (*e.g.*, Grant and Hofmann, 2011), and this research highlights the link of such approaches to employee motivation. Overall, restructuring work to increase opportunities for interaction with service takers, and justifying changes to work practices through service taker benefits are simple to implement approaches with potentially far-reaching impact.

#### *Future Research*

Integrating findings and arguments from the relational approach to job design into the JDR framework raises questions about complementarity, convergence and commensurability of these as yet distinct streams of research. There is common ground between the JDR's conceptualisation of resources and the JCM's description of job characteristics as determinants of psychological and motivational outcomes. It may therefore be informative to examine how work engagement relates to the critical psychological states described in the JCM. At face value, and consistent with the present findings, work engagement may be functionally equivalent to the critical psychological states in the JCM. However, work engagement may also be construed as a mediator in the JCM. In terms of theoretical advances, longitudinal work that investigates work engagement through both JDR and JCM lenses may help to determine the relative and combined value of these frameworks for explaining relevant psychological and motivational outcomes.

A second avenue for future research concerns the role of perceived prosocial impact. Given the professional and personal values common among midwives, perceived prosocial impact can be seen as an appropriate proxy for experienced meaning. Consequently, further research should examine the extent to which perceived prosocial impact translates as an important mediator to other types of jobs in human service settings, and more generally in other service settings. A key question here is if and to what degree perceived prosocial impact may be a predictor of work engagement by service workers more generally. The answer to this question would provide input to academic deliberations about the antecedents of work engagement as well as to pragmatic concerns regarding different conduits for work engagement among different populations.

The relational mechanism through which autonomy appears to be enacted also requires further verification within midwifery itself. Nursing scholars have described the concept of ‘relational autonomy’ as more appropriate to the profession (MacDonald, 2002). It is argued that increasing professional autonomy requires a fine balance between self-directed action, interdependent health care teamwork, and patient advocacy as a consistent priority (MacDonald, 2002). The findings here are relevant to this debate in illustrating that autonomy and perceived prosocial impact may combine in a unique way to promote positive work outcomes. Future research into this relationship may help the midwifery profession to understand how the need for greater professional autonomy can be satisfied without compromising patient well-being.

Finally, an investigation of the utility of interventions aimed at increasing meaningfulness of work through for example the redesign of a job’s relational architecture appear worthwhile. Changes that augment, improve and intensify relevant social interactions with customers, clients and patients would be a simple starting point. Such investigations should also address the

performance implications of increased meaningfulness at work given that clear causal linkages between task significance and job performance have not yet been established (Grant, 2008).

### *Limitations*

While this study provides evidence about predictors of work engagement in a rarely studied profession, the findings should be considered in light of the limitations of the research. A key limitation is the cross-sectional nature of the data used in testing the hypotheses which prevents causal assertions and does not allow ruling out alternative explanations for the novel findings about the role of prosocial impact (*e.g.*, that midwives high in work engagement perceive more prosocial impact). While available empirical evidence from relational approaches to job design (*e.g.*, Grant & Hofmann, 2011; Grant & Sonnentag, 2010) can lend support for the presented conclusions, this issue clearly deserves further investigation, for example, with longitudinal designs that can capture within-person variation in relevant variables. Indeed, reciprocal relations are known to exist between work engagement and predictive factors, as recently demonstrated by Sonnentag, Mojza, Demerouti and Bakker (2012).

Similarly, the reliance on self-report data may have contributed to common method variance problems. As it is difficult to measure intra-psychic variables like work engagement in other ways, we employed design procedures to ameliorate such problems (*e.g.*, varied response formats across scales, see Podsakoff *et al.*, 2012) and carefully analysed the data for potential common method variance influences on the results. Future research should include objective measures of outcome variables such as performance, while indicators derived from survival analyses would also help to extend knowledge beyond the present research.

Finally, the current study exclusively involved midwives. While this provides a rather unique sample in the work engagement literature, it limits the generalisability of the findings to

other settings. The type of job resources and demands that are salient for experiences of work engagement vary according to the type of job (Demerouti *et al.*, 2001), and few jobs outside of human service settings will be characterised by the strong patient, client or customer care orientation created in midwifery through professional socialisation, personal orientations, and organisationally espoused values. Similarly, the unique structure of social interaction in midwifery work may affect the role of different relational resources in predicting work engagement. Prior research on prosocial impact of work, however, has shown its influence in less explicitly social tasks, such as fundraising and public sanitation (Grant and Sonnentag, 2010). Thus, future research should explore the significance of relational mechanisms for work engagement in a diverse range of jobs to determine their impact on work with less developed social dimensions.

## **Conclusion**

The present study investigated the links between relational mechanisms and work engagement at a cross-sectional level. It confirmed already identified antecedents of work engagement in a rather unique and understudied population of midwives and established a case for the importance of perceived prosocial impact of work as a relevant predictor. These findings require and deserve to be investigated further with different designs and across different study populations to more fully establish how relational mechanisms might contribute and mediate resource-experience-outcome paths. Harnessing social resources in the workplace may be the key to intrinsically motivating tasks for contemporary workers but only continued research endeavours can authenticate such speculations and provide the needed input to guide relevant improvements in job design and in managerial efforts to increase employee work engagement.

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