



# ENJOYING NEW WAYS TO WORK: AN HRM-PROCESS APPROACH TO STUDY FLOW

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*This article investigates the relationships between human resource management practices associated with New Ways to Work (employee empowerment, home-based teleworking, and creating trust relationships) and work-related flow as experienced by employees (absorption, work enjoyment, and intrinsic work motivation). Hypotheses, based on a combined perspective integrating insights from the HRM-process model and the job demands-resources model, are tested using multiactor multilevel data comprising employees (N = 1,017) and their line managers (N = 89), across 89 job categories in 30 organizations. Although organizations may implement management practices aimed at empowering employees in particular job categories, this study showed that anticipated effects on work-related flow (particularly work enjoyment) are not achieved when employees themselves do not experience being empowered, and when they do not use and experience their working conditions as job resources (home-based teleworking and trust relationships characterized by supporting leadership, collegial support, and collegial commitment). The article concludes with recommendations regarding organizational change aimed at implementing New Ways to Work and suggestions for future research. © 2014 Wiley Periodicals, Inc.*

**Keywords:** New Ways to Work, work-related flow, HRM-process model, multiactor multilevel data

## Introduction

**S**ince the 1980s, the concepts of *employee empowerment*, *flexible work practice*, and *trust* have been widely discussed in academia. Early accounts of job-design theory and

quality-of-working-life literature emphasized the importance of empowerment for well-being (Hackman & Oldham, 1980; Karasek, 1979; Parker & Wall, 1998). Pioneering telework research discussed the three concepts in concert. In this literature, the implications of

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teleworking were widely discussed (Daniels, Lamond, & Standen, 2000; Handy, 1995; Huws, Korte, & Robinson, 1990; Jackson, 1999; Jackson & Van der Wielen, 1998; Nilles, 1998; Sparrow & Daniels, 1999; Stanworth, 1998). The edited volume of Daniels et al. (2000) and the research agenda of Sparrow and Daniels (1999) presented important accounts on various issues at different levels that could be affected by the introduction of telework practices. For example, at the organizational level, issues such as the organizational form and culture best fitting telework practices were discussed. At the workforce level, the most adequate job design for teleworking was addressed, including the importance of job autonomy and output management. And at the individual-behavioral level, the importance of issues such as psychological contracting and trust relationships were emphasized. At this level, teleworking can be considered as an important job resource and/or demand that may have an impact on well-being (Sardeshmukh, Sharma, & Golden, 2012).

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Recently, the three concepts referred to earlier, *employee empowerment*, *flexible work practice*, and *trust*, have attracted new attention, both in the scientific and societal debates, by making reference to broader management labels, such as: “the new workplace” (Holman, Wall, Clegg, Sparrow, & Howard, 2003); “the New World of Work” (Gates, 2005); the “Results-Only Work Environment” (ROWE) (Moen, Kelly, & Chermack, 2009; Ressler & Thompson, 2008); “new ways of organizing work” (Kelliher & Richardson, 2011); “new ways of working” (Peters, Den Dulk, & Van der Lippe, 2009; Ten Brummelhuis, Bakker, Hetland, & Keulemans, 2012); and “New Ways to Work” (Peters, 2011). In the remainder of this article, the latter label will be used to refer to a set of HRM practices (employee empowerment, teleworking, and creating trust relationships) associated with New Ways to Work (NWW).

Especially in recent years, organizations’ interest in the implementation of NWW has gained momentum, stressing the win-win situation for organizations, workers and their families, and society at large (cf. Peters, 2011). Much in line with the “happy-productive workers” thesis (T. A. Wright & Cropanzano, 2007), it is believed that a bundle or set of HRM practices, such as the NWW practices, supports a “mutual gains perspective” (Guest, 2002; Peccei, 2004). Due to NWW, both employer and employee may profit from work being more efficient, on the one hand, and more meaningful and enjoyable, on the other hand (Peters, 2011; Ten Brummelhuis et al., 2012). As a potential source of competitive advantage, NWW is believed to enable organizations to respond more flexibly to new market requirements, to improve service quality, and to enhance operating efficiency (European Commission, 2002). NWW is also believed to meet increasing calls to go beyond financial outcomes and to take into consideration broader outcomes, such as sustainability and happiness (cf. Blanchflower & Oswald, 2011). Focusing on individual-level positive work outcomes is important in management nowadays (Gratton, 2007).

The present study focuses on one of NWW’s alleged work outcome: work enjoyment, in this study conceptualized as “work-related flow” (Bakker, 2005, 2008; Csikszentmihalyi, 1997). We aim to contribute to the debate on NWW by empirically investigating the relationships between a set of HRM practices associated with NWW on the one hand and employees’ experiences of work-related flow on the other. Flow can be defined as a short-term peak experience and can be conceptualized by three dimensions: (1) absorption, (2) work enjoyment, and (3) intrinsic work motivation (Bakker, 2008). *Absorption* refers to a state of total concentration (i.e., a state in which employees are totally immersed in their work). *Work enjoyment* refers to employees’ evaluation regarding the quality of their working life. *Intrinsic motivation* refers to the desire to perform an activity in order to experience satisfaction due to the inherent pleasure of the work activity itself (Bakker, 2008). When employees experience these

three states, both more frequently and more intensely, they experience more flow (Bakker, 2008). After a flow experience, an employee feels happy and satisfied (Csikszentmihalyi, 1997; Diener, 2000), and as such, achieving “a state of flow” can be viewed as a goal in itself (Salanova, Bakker, & Llorens, 2006), but it can also be a factor in enhancing employee performance (Engeser & Rheinberg, 2008).

This study is innovative in several ways. First, up until now, research into the impact of NWW as a *bundle* or *set* of work practices on positive employee outcomes is scarce, with the work by Peters et al. (2009) and Ten Brummelhuis et al. (2012) being exceptions. Rather, previous studies often investigated the effects of only single practices associated with NWW. For example, Gajendran and Harrison (2007) focused on the individual consequences of teleworking. Biron and Bamberger (2011) investigated the impact of empowerment on individual well-being. Other studies focused on the implications of flexible working for work-life balance (cf. Bloom & Van Reenen, 2006; Kelliher & Anderson, 2008), or paid attention to the impact of time-flexible work practices on employee well-being (cf. Kelliher & Anderson, 2010). In this contribution, we will focus on a bundle or set of NWW practices, herewith closing an important gap in the literature.

Second, an important limitation of previous research is that no distinction has been made between so-called “intended practices,” as implemented by line management at the job-category level, and so-called “perceived practices,” as interpreted and used by employees at the shop-floor level. In the present study, based on the insights from the “process-based approach of strategic human resource management” (Nishii, Lepak, & Schneider, 2008; P. M. Wright & Nishii, 2006), we argue that this distinction is important and should be taken into account in empirical work. It can be assumed that actors may have different interpretations of the NWW practices content. Intentions and perceptions of NWW practices by management are not necessarily similar to the ones by employees.

More specifically, applying the theory of Nishii et al. (2008), this study builds upon the idea that line managers’ implementation of NWW practices, such as empowerment practices, may or may not be accompanied by employees’ perceptions of being empowered, and, therefore, may or may not lead to the anticipated work outcomes, such as flow. In order to accommodate this theoretical insight, the present study employs multiactor multilevel data.

Third, the HRM-process model provides us with only a general framework. Therefore, we need to combine the insights from this model with a model that allows us to explain the mechanisms affecting flow as experienced by employees. In order to do so, we build on the insights of the job demands-resources model (JD-R model) (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). This model suggests that job demands can be stressors, while job resources can be motivators. Striking a balance between the two can lead to “active work” (Karasek, 1979) that can foster work enjoyment. Yet, previous studies on flow using the JD-R model have not looked into line managers’ perceptions and implementation of HR practices, but rather have focused on how working conditions as such are perceived and experienced by employees at the shop-floor level (Peters & Wildenbeest, 2010, 2011), with exceptions being Bakker (2008) and Demerouti et al. (2001). In the present multiactor multilevel study, theoretical and empirical insights from the HRM-process model are combined with insights from the JD-R model. This combined approach provides for a more theoretically composite understanding to develop a set of hypotheses on the relationships between the core concepts of NWW and flow.

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## Theoretical Framework

### *The HRM-Process Model*

HRM practices can be viewed as important job resources. However, any inherent virtue attached to the implementation of HRM practices cannot be fully realized unless such practices are delivered in such a way that employees can perceive them as intended. The argument of the HRM-process model is that employees' attitudinal and behavioral responses to HRM practices depend on the specific practices that employees perceive to exist in their work context (Bowen & Ostroff,

2004). Because employees' perceptions of HRM practices necessarily follow after managers' HRM practices implementation (P. M. Wright & Nishii, 2006), employees' perceptions of HRM practices are "temporally closer to, and consequently likely to be more predictive of their attitudinal and behavioral outcomes than are HRM practice ratings as provided by managers" (Kehoe & Wright, 2013, p. 369). As a result, the HRM-process model suggests that management develop: (1) intended HRM practices, which are translated into (2) actual HRM practices as implemented by line management, resulting in (3) perceived and used HRM practices, which lead to (4) employee reactions, eventually leading to (5) organizational performance (P. M. Wright & Nishii, 2006).

When an organization intends to work according to a novel way of working, such as NWW, it is not self-evident that line managers are all very enthusiastic to implement it, let alone encourage or permit the use of the associated practices among their subordinates (cf.

Peters, Den Dulk, & De Ruijter, 2010). Hence, in spite of organizations having the intention to empower employees, one's supervisor remains in a position to

limit the discretionary power of individual subordinates (Lashley, 2001). Moreover, it can be questioned whether the implementation of NWW practices at the job-category level are similarly perceived and experienced by employees at the shop-floor level, and, consequently, whether the anticipated work outcomes, such as flow, are actually achieved. Put differently, employees do not just feel more empowered because line management tells them they are (Bowen & Lawler, 1995). Rather, employees must recognize themselves to be empowered. The limited empirical research in this area showed that the perceptions of employees regarding implemented HRM practices matter. For instance, Kehoe and Wright (2013) found that employees' perceptions of HRM practices implemented at the job-category level were positively related to employee attitudes and behaviors. Moreover, Liao, Toya, Lepak, and Hong (2009) demonstrated that employees' perceptions of HRM practices significantly varied from managerial reports of the implemented practices. Nishii et al. (2008) showed that employees make varying positive or negative attributions to the same HRM practices, and that these attributions are associated with employee outcomes, such as commitment and satisfaction.

Obviously, the HRM-process model emphasizes the importance of the role of line managers in the implementation of HRM practices (Purcell & Hutchinson, 2007); in this case, NWW practices. Increasingly, line managers play a key role in HRM (Thornhill & Saunders, 1998) and might therefore have a direct impact on their subordinates' perceptions of and reactions toward HRM practices (Gilbert, De Winne, & Sels, 2011). Truss (2001) found a strong disconnect between the "rhetoric" of human resource management as expressed by line managers and the "reality" as experienced by employees. In addition, each individual manager appears to choose to focus his or her attention regarding HRM practices in varying ways (Truss, 2001, p. 1145).

However, it is not only the difference in perceptions of HRM practices between line managers and employees that matters; the relationship between line managers and

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their subordinates is also important in how employees experience the HRM practices context. While some HRM practices may have a direct impact on employee outcomes, most employees rely on line managers' support, and, therefore, the quality of the relationship between employees and their line manager influences employees' perceptions of HRM practices (Guest & Conway, 2004; Hutchinson & Purcell, 2003). Purcell and Hutchinson (2007) showed that there is a dynamic relationship between the leadership behavior of line managers and the impact of HRM practices on employee experiences. Most notably, employees' satisfaction with HRM practices and employees' assessment of their line managers' leadership behavior were directly related to higher levels of experienced job autonomy and affective commitment. Moreover, experienced support from their manager develops trust in the workplace, influencing positive employee outcomes (Whitener, Brodt, Korsgaard, & Werner, 1998; Zhang, Tsui, Song, Li, & Jia, 2008).

In light of the above, both implemented HRM practices as perceived by line managers and perceived and actually used HRM practices by employees need to be taken into consideration when explaining flow. In addition, in the context of our study, we need to include trust relationships as created by supportive behavior of line managers. Before we further specify the hypotheses that will be tested in this study, the mechanisms underlying employees' flow experiences as described in the JD-R model need to be discussed.

### *The Job Demands-Resources Model*

The JD-R model distinguishes between two broad categories of working conditions: (1) job demands and (2) job resources (Demerouti et al., 2001). Job demands may refer to physical, psychological, social, or organizational aspects of work, which require physical or mental effort of the worker (Demerouti et al., 2001). Job resources are defined as those physical, psychological, social, or organizational aspects of work that are useful with regard to: (1) the achievement of work-related goals; (2) the reduction of demands and

associated costs; or (3) the enhancement of personal development (Demerouti et al., 2001). In the literature, several categories of job resources are distinguished: (1) at the organizational level; (2) at the interpersonal level; and (3) at the individual job or task level (Schaufeli & Bakker, 2004). HRM practices, for instance those associated with NWW, comprise a set of resources at the organizational level. Managerial and collegial support appear to be among the most important resources at the interpersonal level (Bakker, 2008; Bakker, Demerouti, Hakanen, & Xanthopoulou, 2007). Job autonomy comprises an important example of a resource at the job level (Bakker, 2008; Bakker & Geurts, 2004).

The JD-R model also describes two central explanatory mechanisms: the so-called health-impairment process and the motivation process. In the *health-impairment process*, job demands continuously use up energy reserves. Yet, job demands only become stressors when time to recover is insufficient. In this latter case, too much effort leads to exhaustion (Demerouti et al., 2001). In the *motivation process*, a lack of job resources leads to mental distance toward work, while high presence of job resources has positive effects, including outcomes such as flow (cf. Bakker, 2008; Schaufeli, Salanova, González-Romá, & Bakker, 2002).

With regard to flow, it is assumed that workers experience flow in cases when job demands are not too high, and job resources are sufficiently present (Salanova et al., 2006). The presence of job resources (e.g., supporting working conditions and supportive behavior of the supervisor, as well as supportive behavior from colleagues) is assumed to both motivate employees in their work and enable them to cope with the effects that job demands, such as targets and deadlines, may have on employees' well-being, such as their experiences of flow. The

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implementation of such a combination of job demands and resources, such as the set of NWW practices, may lead to so-called “active work” (cf. Karasek & Theorell, 1990; Taris, Kompier, De Lange, Schaufeli, & Schreurs, 2003; Ten Brummelhuis et al., 2012). This will be elaborated on later.

### *The Implemented Employee Empowerment Hypothesis*

Employee empowerment refers to both high levels of job autonomy and accountability for individual and team performance (Conger & Kanungo, 1988; Koberg, Boss, Senjem, & Goodman, 1999; Peccei & Rosenthal, 2001). Definitions of empowerment mainly emphasize “control” and “commitment” (Lashley, 2001), and entail shifting external control over an employee to self-management (i.e., to control that is generated by an employee internally). This does not necessarily need to have consequences for the content of the employee’s work. However, the accountability regarding the execution of the work activities is increasingly shifted toward the employee, who is increasingly rated on the basis of his or her performance (Bowen & Lawler, 1995). Keep in mind that the degree to which employee empowerment is implemented within an organization can differ across job categories. Therefore, in line with Peters et al. (2009), in this study, the degree of employee empowerment implemented by a line manager of a particular job category is conceptualized as a set of HRM practices imposed by the line manager upon the subordinates working within a specific

job category. This conceptualization of implemented employee empowerment at the job-category level comes down to a bundle of HRM practices comprising: (1) job autonomy, (2) team working by projects, and (3)

output management (i.e., setting goals and deadlines) (Peters et al., 2009).

In studies using the JD-R model, *job autonomy* is considered to be an important job resource that fosters flow (Bakker, 2005; Peters & Wildenbeest, 2010, 2011). Also implementing *team working by projects* can be viewed as a job resource, as it makes employees enthusiastic, inspires them, motivates them, and helps them to find solutions themselves to work-related problems (Parker & Wall, 1998). Following goal-setting theory (Locke & Latham, 1990), implementing output management (i.e., setting goals and deadlines) can help employees to become motivated for their tasks, as these aspects ensure that employees can work toward certain goals and get feedback on their work results, all being important factors in achieving flow (Bakker, 2005; Csikszentmihalyi, 1997; Demerouti et al., 2001; Locke & Latham, 2002; Saks, 2006; Salanova et al., 2006).

In societal debates, NWW is often considered “active work.” However, some of the practices associated with the implementation of employee empowerment at the job-category level may also be viewed as job demands, and can counter the achievement of flow. Both autonomy and the inherent increased accountability require a lot of employees’ attention and energy; teamwork can be an exhausting HRM practice (Waterson et al., 1997), and output management (setting goals and deadlines) can cause stress (Karasek, 1979). Yet, despite this, we assume that employee empowerment implemented at the job-category level can also make work more challenging and more satisfying, which can motivate employees and, at the end of the day, may lead to more work enjoyment (cf. Lovelace, Manz, & Alves, 2007).

Based on the outline given earlier, the *Implemented Employee Empowerment Hypothesis* at the job-category level was formulated as follows:

*Hypothesis 1a: Employees experience more work-related flow when employee empowerment through a bundle of job autonomy, teamwork, and output management (setting goals and deadlines) is implemented.*

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*Implementing output management (i.e., setting goals and deadlines) can help employees to become motivated for their tasks, as these aspects ensure that employees can work toward certain goals and get feedback on their work results, all being important factors in achieving flow.*

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## *The Perceived Employee Empowerment Hypothesis*

Following the HRM-process model, we acknowledge that the bundle of NWW practices as implemented by line management does not necessarily result in similar perceptions and experiences of these practices by employees (Bowen & Ostroff, 2004). When an organization intends to work according to a novel way of working, such as NWW, it is possible that line managers react in varying ways and may have discretionary power to decide about encouragement or limiting the use of the HRM practices among different categories of subordinates (cf. Peters et al., 2010). Employees may also not perceive the practices as a coherent bundle and may react differently on each single practice. Therefore, in order to analyze the effect of employee empowerment associated with NWW on flow, we need to take into account employees' subjective perceptions of the degree of empowerment.

The *Perceived Employee Empowerment Hypothesis* at the employee level was formulated as follows:

*Hypothesis 1b: Employees experience more “work-related flow” when they perceive more empowerment (perceived job autonomy, and output management [i.e., setting goals and deadlines]).*

## *Use of Telework Hypothesis*

Telework practices may be available to all employees, but it is likely that this is not always the case (Peters et al., 2010). In previous studies, telework is rather considered an “idiosyncratic deal” (Rousseau, 2001), meaning that individual employees have to negotiate with their employer or supervisors about having permission to work from home during contractual working hours (cf. Peters et al., 2010). Moreover, not all employees may be willing to telework as they do not perceive and experience the benefits of flexibility practices (Kossek, Lautsch, & Eaton, 2006). Therefore, our focus is on employees' enacted teleworking behavior, taking into account employees' structural use of teleworking in their weekly work routines. Using the JD-R model,

teleworking can reduce work interruptions, allowing home-working employees to disconnect from colleagues and customers, in order to have more opportunities for reflection and recovery from the busy main office, and, consequently, to experience more flow (Peters & Wildenbeest, 2010, 2011).

Based on this, the following *Use of Telework Hypothesis* was formulated:

*Hypothesis 2: Employees experience more “work-related flow” when teleworking constitutes a structural part of their weekly work routines (that is, when they work from home at least one day per week).*

## *Perceived Support Hypotheses*

Consistency of an implemented HRM system implies that the NWW practices are supported by trust relationships to reinforce intraorganizational cooperation, being the third element of NWW as distinguished in the Introduction section. Of course, trust is essential with regard to all interpersonal relations, team cohesion, and cooperation, but, obviously, it is particularly important in NWW environments (Nilles, 1998). In other words, implementing empowerment and telework not only implies shifting toward new structures and practices, but also requires a shift to trust relationships (cf. Dirks & Ferrin, 2002; Peters et al., 2010). Trust refers to the positive expectations of the behavior and skills of others, and their commitment to the achievement of a common goal (Handy, 1995; Lewicki, McAllister, & Bies, 1998; Whitener et al., 1998; Zhang et al., 2008). Conceptualizations of trust are mainly based on Blau's (1964) social exchange theory. Trust evolves over time due to positive interactions and supportive behavior (Lewicki & Bunker, 1996) and is an important factor with regard to positive work outcomes (Innocenti, Pilati, & Peluso, 2011). In this study, two types of intraorganizational trust relationships are incorporated: (1) the relationship between a manager and a subordinate and (2) the relationships among colleagues.

NWW demands a nontraditional leadership style. A traditional leadership style,

such as the transactional leadership style, implies that the manager tells employees what is required of them, and how they will be rewarded when having fulfilled these requirements (Bass, 1985). However, there are alternative ways to manage, which are more in line with the vision underpinning NWW. Transformational or supporting leaders, also noticing a concern for the employees' welfare, make employees feel respected and trusted (Bass, 1985; Dirks & Ferrin, 2002; Dorfman et al., 1997).

Using the JD-R model, a line manager–employee relationship that is characterized as being supportive can be viewed as a job resource (Mäkikangas, Bakker, Aunola, & Demerouti, 2010), as it decreases emotional exhaustion and depersonalization, and motivates employees. Line managers' support is a resource in that it is functional in achieving work goals. Support protects employees from the negative consequences of stressful experiences (Cohen & Wills, 1985). In a similar vein, a high-quality relationship with one's supervisor may alleviate the negative influence of job demands (work overload, physical demands, and work-home interference). Leaders' appreciation and support may also aid the worker in coping with the job demands, and act as a protector against poor health (Bakker, Demerouti, & Euwema, 2005). Consequently, supportive leadership can be associated with positive work outcomes, such as job satisfaction (Bakker et al., 2005) and flow (Salanova et al., 2006).

Based on the outline given earlier, the first *Perceived Support Hypothesis* at the shop-floor level was formulated as follows:

*Hypothesis 3a: Employees experience more work-related flow when they perceive a more supportive leadership style.*

Trust relationships with colleagues can also foster employees' motivation process. If trust among employees is high, they can feel at ease because of the good relationships, and this can aid their well-being and happiness (Csikszentmihalyi, 1997). Support from colleagues is an important job resource, as it can help to get the work done in time and may

therefore alleviate the impact of job demands: work overload or strain, including burnout (Van der Doef & Maes, 1999). From previous research, it is already known that good relationships with colleagues are positively associated with job satisfaction (Cook & Wall, 1980), and with other behavioral and psychological outcomes (Ferres, Connell, & Travaglione, 2004), such as flow (Peters & Wildenbeest, 2010, 2011).

In this research, trust relationships within the organization are measured by means of two concepts: *collegial support* (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003) and *collegial commitment* (Ellemers, De Gilder, & Van Den Heuvel, 1998), both reflecting the interconnectedness among employees, and their willingness to support each other and to have meaningful relationships at work.

Based on this, the second *Perceived Support Hypothesis* was formulated as follows:

*Hypothesis 3b: Employees experience more "work-related flow" when they perceive more collegial support and collegial commitment.*

## Methodology

### *Sampling and Procedure*

The multiactor multilevel data used in this study are part of a large multifirm dataset collected by means of a multistage sampling approach. In the first stage, 30 organizations in the Netherlands were selected, covering public and private organizations (see also Van Echtelt [2007, p. 33] for an overview of the distribution of sectors in the sample). As organizations may differentiate working conditions across job categories, in the second stage, two or three job categories were selected, jobs in each single job category being characterized by homogenous working conditions with regard to the degree of autonomy, output management (setting goals and deadlines), and flexibility. For example, in a university department, the job categories "scientific personnel" and two "supporting staff" categories were selected. For each of the selected job categories, line managers were asked to complete a fully structured paper

questionnaire on the characteristics of the working conditions of their subordinates. In the third stage, based on a random selection from an internal telephone list, 3,970 employees from the selected job categories were contacted at work in order to ask whether they would be willing to participate in the study: 1,114 employees (response rate 28 percent) agreed. To prevent respondents from pulling out, interviewers were sent to the employees' homes to support respondents with the completion of two types of fully structured questionnaires: an extensive computer-aided questionnaire, including questions on employees' perceptions of their working conditions, and a paper questionnaire with additional questions, including questions on flow. The completion of both took 1 to 1.5 hours.

The working conditions data provided by the job categories' line managers ( $N = 89$ ) could be matched with the two employee datasets ( $N = 1,114$ ). Consequently, after merging the three datasets, the newly composed dataset had a nested structure that allowed us to gain insight into the implemented working conditions as indicated by the line managers, and how these were perceived by employees at the shop-floor level. In the total sample, 26 percent of the employees were single, 62 percent had young children, 48 percent were female, and 60 percent were highly educated (higher vocational training or university), with the average age being 40 years (Van Echtelt, 2007, p. 34).

## Measurements

*Work-related flow* was measured using the psychometrically validated "Work-reLated Flow inventory" (WOLF) (Bakker, 2008), consisting of 13 items representing three flow dimensions. The item scores were reversed such that higher scores corresponded with higher levels of flow, with scale anchors ranging from 1 (never) to 7 (always). *Absorption* was measured by means of four items (Cronbach's  $\alpha = 0.77$ ); *Work enjoyment* was measured by means of four items (Cronbach's  $\alpha = 0.88$ ), and *intrinsic motivation* was measured by means of five items (Cronbach's  $\alpha = 0.72$ ). The *total flow* score was calculated by summing the

scores on the subscales (Cronbach's  $\alpha = 0.89$ ). Example items were: "When I am working, I think about nothing else" (absorption), "My work gives me a good feeling" (work enjoyment), and "I would still do this work, even if I received less pay" (intrinsic motivation). In this study, we primarily focus on the three separate flow dimensions.

*Implemented employee empowerment* (at the job-category level) was measured by means of a four-item scale (Peters et al., 2009). The four single items measured an implemented bundle of HRM practices: (1) professional job autonomy, (2) teamwork, and output management, operationalized as setting (3) goals and (4) deadlines, respectively (Cronbach's  $\alpha = 0.75$ ). The job categories' line managers were asked to specify to what extent these working conditions applied to their subordinates. A five-point Likert scale was used, with a higher score corresponding with the implementation of more empowering practices.

As our employee data did not include information on teamwork, *perceived employee empowerment* was measured by means of three single variables: (1) perceived job autonomy, (2) goals, and (3) deadlines. Analyses showed that these three variables could not be considered as one bundle or construct (Cronbach's  $\alpha = 0.20$ ). Perceived employee empowerment was measured by the three single measures. Perceived job autonomy was measured by means of a three-item scale (Bakker et al., 2003)—for example, "Can you decide how you want to perform your work?" (Cronbach's  $\alpha = .69$ ). The employee perception regarding "frequency of deadlines at work" and regarding "the degree to which the employee is judged on the basis of output" were both measured by means of one single item. Higher scores on the three variables corresponded with higher employee perceptions of job autonomy, importance of achieving goals, and frequent deadlines, respectively.

*Telework* as a supporting HRM practice in NWW was measured as the employee's actual weekly teleworking frequency. A dummy variable was calculated for employees who teleworked one day per week or more ( $\geq 1$  day telework) (those who teleworked less than one day per week being the reference category).

Trust relationships were operationalized by means of three “support variables” at the employee level. First, *supporting leadership* was measured by means of five items (Cronbach’s  $\alpha = .89$ )—for example, “My supervisor lets me know whether he/she is satisfied with my work” (Le Blanc, 1994). Second, *collegial support* was measured by means of three items (Cronbach’s  $\alpha = 0.80$ )—for example, “Can you rely on your colleagues when you face difficulties from work?” (Bakker et al., 2003). Third, *collegial commitment* was measured using six items (Cronbach’s  $\alpha = .70$ )—for example, “I regularly talk with colleagues about things that are unrelated to work” (Ellemers et al., 1998). All were scored on a five-point Likert scale. A higher score on these three variables corresponded with stronger trust relationships as perceived by the employees.

### Data Analysis

First, to check for multicollinearity, a correlation analysis was performed. Table I shows that the independent variables used in this study did not intercorrelate higher than the value’s limit ( $r < .9$ ). Second, an ANOVA analysis was conducted to compare the scores on the independent and dependent variables across employees in job categories with scores on the implemented empowerment bundle that were higher than the median (3.5) comprising Group 1 (“More Empowering Working Conditions”) and the reference group (Group 0 that scored below 3.5). Third, because of the multilevel structure of the data (*i* employees, “nested” in *j* organizations), we used hierarchical linear models to test our hypotheses.

### Results

First, the correlations in Table I show that, in contrast to expectations, flow was neither significantly associated with the bundle variable representing *implemented employee empowerment* (empowerment) ( $r = -.00$ ), nor with the single items constituting the bundle variable (implemented autonomy, implemented teamwork, implemented goals, and implemented deadlines). In fact, the correlation between the bundle variable and the flow

dimension “work enjoyment” was negative ( $r = -.09^{**}$ ). However, the variables *perceived job autonomy* ( $r = .30^{**}$ ), the three trust relationship variables (*leadership*,  $r = .33^{**}$ ; *collegial support*,  $r = .33^{**}$ ; and *collegial commitment*,  $r = .29^{**}$ ), and the *teleworking* variable ( $r = .10^{**}$ ) were positively correlated with flow. Strikingly, the single items constituting the bundle variable *implemented employee empowerment* were positively but not very highly correlated with the *perceived employee empowerment* variables (*perceived job autonomy*, *perceived goal setting*, and *perceived deadlines*), the highest correlation being between intended deadlines and perceived goals ( $r = .40^{**}$ ).

Second, Table II shows the results of the ANOVA analysis. Group 1, comprising employees whose line managers stated to have implemented more employee empowerment practices, differed significantly from Group 0, the reference category. Group 1 perceived, on average, significantly more job autonomy ( $F[1, 1068] = 13.6, p < .001$ ) and goal setting ( $F[1, 1068] = 52.3, p < .001$ ). Moreover, a larger part of them worked regularly one day or more from home ( $F[1, 1068] = 5.7, p < .05$ ). Yet, Group 1 also perceived less collegial commitment ( $F[1, 1019] = 11.2, p < .001$ ) and, in contrast to our expectations, experienced less work enjoyment ( $F[1, 1019] = 8.3, p < .01$ ).

Third, focusing on the three separate flow dimensions, Table III shows that the bundle variable *implemented employee empowerment* was not significantly associated with either higher absorption levels ( $B = -.08, p > .05$ ) or with intrinsic motivation ( $B = -.01, p > .05$ ). Strikingly, however, with regard to work enjoyment, a significantly negative relationship was found ( $B = -.15, p < .001$ ). In line with the ANOVA analyses, but contrary to our expectations as formulated in Hypothesis 1a, empowering working conditions were not associated with more flow. *Perceived job autonomy* was positively associated with absorption ( $B = .18, p < .001$ ), work enjoyment ( $B = .22, p < .001$ ), and intrinsic motivation ( $B = .24, p < .001$ ). Goal setting was not associated with any of the three flow dimensions, although perceiving more frequent deadlines was positively associated with absorption ( $B = .05, p < .05$ ). This means that

**TABLE I** Internal Consistencies and Correlations Between the Variables in the Study ( $N = 1,017$ )

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Flow	.89															
2. Absorption	.84**	.77														
3. Enjoyment	.85**	.58**	.88													
4. Intrinsic motivation	.89**	.61**	.66**	.72												
5. Empowerment (bundle)	-.00	.01	-.09**	.05	.75											
6. Autonomy	.01	-.02	-.03	.05	.69**	1										
7. Teamwork	-.02	.03	-.07*	.07*	.82**	.35**	1									
8. Goal setting	-.03	.02	-.11*	-.01	.74**	.26**	.60**	1								
9. Deadlines	-.02	-.01	-.08*	.02	.76**	.51**	.45**	.40**	1							
10. Perceived job autonomy	.30**	.20**	.27**	.28**	.18**	.15**	.15**	.12**	.13*	.69						
11. Perceived goal setting	.04	.02	.00	.06	.34**	.30**	.23**	.11**	.40**	.07*	1					
12. Perceived deadlines	.01	.04	-.03	-.01	.12**	.00	.10**	.15**	.11**	.00	.10**	1				
13. Teleworking	.10**	.10**	.03	.12**	.16**	.15**	.10**	.03	.21**	.12**	.16**	-.01	1			
14. Leadership	.33**	.24**	.34**	.27**	.03	.01	.05	.08*	-.04	.20**	-.03	-.07*	-.08**	.89		
15. Collegial support	.33**	.21**	.42**	.23**	-.02	-.01	-.02	-.01	-.04	.17**	-.03	-.04*	-.07*	.36**	.80	
16. Collegial commitment	.29**	.16**	.37**	.23**	-.11	-.09**	-.06	-.08*	-.11**	.13**	-.07*	.05	-.10**	.33**	.45**	.70

Cronbach's alphas are listed on the diagonal.

\* $p < .05$ .\*\* $p < .01$ .

**TABLE II** Group Comparison Mean Scores Working Conditions by Implemented Employee Empowerment Practices (Less Versus More Empowering Working Conditions) (ANOVA)

Variables	Means		
	Less Empowering Working Conditions (N = 637)	More Empowering Working Conditions (N = 380)	All (N = 1,017)
Empowerment (bundle)	2.82	4.13***	3.31
Total flow	4.47	4.41	4.45
Absorption	4.11	4.09	4.10
Work enjoyment	5.12	4.95**	5.06
Intrinsic motivation	4.25	4.24	4.24
Perceived job autonomy	3.86	4.06***	3.93
Perceived goal setting	2.47	3.11***	2.71
Perceived deadlines	2.98	3.09	3.02
Teleworking (1 day or more per week)	0.06	0.10*	0.08
Supporting leadership	3.66	3.68	3.67
Collegial support	3.90	3.83	3.87
Collegial commitment	3.70	3.59***	3.66

\* $p < .05$ .\*\* $p < .01$ .\*\*\* $p < .001$ .**TABLE III** Multilevel Regression of Flow Dimensions on New Ways to Work Practices (Unstandardized Effects) (N<sub>organizations</sub> = 30, N<sub>employees</sub> = 1,017)

	Absorption (B)	Work Enjoyment (B)	Intrinsic Motivation (B)
<b>Constant</b>	1.70***	1.50***	1.15***
Empowerment (bundle)	-.08	-.15***	-.01
Perceived autonomy	.18***	.22***	.24***
Perceived goal setting	.02	.03	.03
Perceived deadlines	.05*	-.00	.00
Teleworking (1 day or more per week)	.43***	.24**	.40***
Supporting leadership	.25***	.22***	.21***
Collegial support	.15***	.30***	.12**
Collegial commitment	.08	.30***	.23***
Variance components			
Level of the organization	.01	.00	.01
Level of the employee	.93***	.62***	.74***

\* $p < 0.05$ .\*\* $p < 0.01$ .\*\*\* $p < 0.001$ .

Hypothesis 1b was partly supported by the data, particularly stressing the importance of perceived job autonomy.

Teleworking was shown to be positively associated with absorption ( $B = .43, p < .001$ ),

work enjoyment ( $B = .24, p < .01$ ), and intrinsic work motivation ( $B = .40, p < .001$ ), which supports Hypothesis 2. Supporting leadership was positively associated with absorption ( $B = .25, p < .001$ ), work enjoyment ( $B = .22,$

$p < .001$ ), and intrinsic motivation ( $B = 21$ ,  $p < .001$ ). Also collegial support was positively associated with absorption ( $B = .15$ ,  $p < .001$ ), work enjoyment ( $B = .30$ ,  $p < .001$ ), and intrinsic motivation ( $B = .12$ ,  $p < .01$ ). Collegial commitment was positively associated with work enjoyment ( $B = .30$ ,  $p < .001$ ) and intrinsic motivation ( $B = .23$ ,  $p < .001$ ), but not with absorption ( $B = .08$ ,  $p > .05$ ), which means that Hypotheses 3a and 3b were largely, although not fully, supported.

## Discussion

With this study, we contributed to the literature on the impact of HRM practices associated with New Ways to Work on work-related flow as an important positive work outcome, in several ways. First, we investigated the impact of a bundle or set of practices associated with NWW instead of the impact of a single NWW practice. Second, following the HRM-process model, we distinguished between implemented practices and how these practices are perceived by employees and how this may impact flow. Third, to elaborate the HRM-process model, we used the JD-R model theorizing the mechanisms that may foster flow. We combined insights from the HRM-process model with theorizing and empirical outcomes based upon the JD-R model. Since HRM practices can be used and perceived as a bundle shaping active work differently by several actors in the organization, our analyses have been performed using a multiactor multilevel dataset, including information from both managers and employees. Based on the existing literature on NWW, three of its core elements were taken into account to both conceptualize and, subsequently, operationalize this novel management concept: (1) a bundle of empowerment (measured in terms of job autonomy, teamwork, and output management [goals and deadlines]), (2) teleworking, and (3) the creation of trust relationships. We expected practices associated with NWW to shape conditions for “active work” (Karasek, 1979) and, hence, to act as a job resource (Ten Brummelhuis et al., 2012) that has the potential to reduce exhaustion and to stimulate intrinsic motivation and, consequently, to increase flow.

From our empirical work, in the first place, we may conclude that the indicators used in this study to measure employee empowerment implemented by line managers at the job-category level were shown to constitute an HRM bundle of job autonomy, teamwork, and output management. Yet, no such bundle could be formed on the basis of the indicators of employee empowerment (job autonomy, goal setting, and deadlines) as perceived by employees. However, the implemented bundle of employee empowerment (measured by means of the line managers’ perceptions) was shown to correlate positively, but not very strongly, with varying degrees, with the single indicators of perceived employee empowerment used in this study. These findings support the HRM-process model (P. M. Wright & Nishii, 2006) where implemented bundles of practices were not fully in line with the individual incumbents’ perceptions of practices.

In the second place, it can be concluded that the HRM bundle characterizing implemented working conditions at the job-category level that are assumed to stimulate the job incumbents’ empowered behavior is not necessarily significantly associated with higher levels of employees’ flow perceptions. In fact, employees in more empowered job categories even experienced less work enjoyment. Only employees who perceived their individual working conditions as empowering, particularly indicated by their perceptions of higher job autonomy levels, reported to achieve higher levels of flow in comparison with their peers. Obviously, solely implementing a bundle of new working conditions on the job-category level does not suffice to achieve the desired positive work outcomes—in this case, higher levels of flow. Moreover, our outcomes might be taken to signify that a top-down implemented bundle of HRM practices does not necessarily lead to changes in the actual situation at the shop-floor level—that is to say, as experienced by employees themselves. In fact, when empowerment is only imposed top-down, it could even be a potential source of stress (cf. Dawson & Webb, 1989), especially when employees’ responsibility and accountability over their achieved

results is imposed on them, but not combined with an actual increase of job autonomy, and, with that, the possibility of really bearing responsibility for the end result. In fact, it could even be true that the implementation of a novel management concept with a positive connotation, such as NWW, is used by the organization's top management, perhaps and hopefully unwittingly, to accept work intensification and higher stress levels (Fleetwood, 2007; Murray, Bélanger, Giles, & Lapointe, 2002). Making employees really feel empowered could be an effective means to increase their work enjoyment. As a matter of fact, however, the positive relationship between characteristics of empowerment as

Changing an organizational culture toward more trust and cooperation takes time, and can face resistance, from both employees and managers. The latter may feel especially uncomfortable with NWW practices, as implementing NWW should be centered on the employees themselves.

perceived by employees and their flow perceptions could also be the result of a situation that was created bottom-up, and deserves further attention from different management parties in working organizations, as the associated practices may be further institutionalized to improve working conditions in the organization (Holman, Wood, Wall, & Howard, 2005).

In the third place, it can be concluded that employees who worked from home at least one day per week have the potential to reach higher levels of flow in comparison with their peers. By regularly working from home, perhaps more time for reflection and recovery is found, which could influence employees' flow levels positively (Peters & Wildenbeest, 2010). Of course, also teleworking does not always have to be caused by a top-down policy, such as, for instance, by the implementation of NWW. Our results, however, indicate that the actual telework-

ing practice runs parallel with higher levels of flow. Of course, the optimal teleworking frequency and the effects of teleworking on other work outcomes affecting employees' flow demand further investigation, using bottom-up approaches as well.

Fourth, creating trust relationships was also found to be an important job resource in enhancing flow. In line with previous flow research (Bakker, 2005), it was shown that employees who perceived their supervisors as supportive, and who perceived more collegial support and collegial commitment, experienced higher levels of flow. This information is important because creating trust relationships is often forgotten when implementing New Ways to Work, such as teleworking, which may often be viewed as a technological change, rather than a cultural change (cf. Daniels et al., 2000).

### Practical Implications

The growing interest in NWW and the expectation that more and more organizations have started to (partly) implement this management concept to balance competing needs of employers, employees, and society at large (Peters, 2011) were motives to set up this research. This study showed that organizations wherein top management representatives expect that they can suffice with merely introducing NWW practices might not achieve the results they aimed for. This holds especially when they do not consider the need for a (new) supporting culture enhancing the sustainable success of NWW (i.e., a culture focusing on coaching, cooperation, and collegial commitment). Unfortunately, it appears that working organizations often neglect to honor this important aspect in the usually complicated and long-term change process toward NWW. Of course, changing an organizational culture toward more trust and cooperation takes time, and can face resistance, from both employees and managers. The latter may feel especially uncomfortable with NWW practices, as implementing NWW should be centered on the employees themselves. Gaining a better understanding of how such a cultural transition toward NWW can be achieved requires additional research. Future research may focus on the organization's or managers' interventions that persuade other stakeholders to adopt the NWW practices in terms of favorable attitudes and behavioral intentions. Involving stakeholders in the adoption process

may include training and socializing them in light of the new requirements associated with NWW. Moreover, the physical environment and the information and communication technology also may be factors enhancing NWW adoption. It should be realized, however, that some new working practices, such as teleworking, can undermine the social cohesion or trust relationships in the organization (Kurland & Cooper, 2002; Sardeshmukh et al., 2012). Yet, as these aspects were shown to be vital resources for flow, more empirical research is required into balancing the aforementioned elements of NWW constituting the HRM system.

### *Limitations of Our Study and Recommendations for Future NWW Research*

NWW is a broad concept that can be interpreted in many ways. It can be associated with many different combinations of implemented working conditions (bundles) and, when also perceived as such by employees, may influence the performance of employees and, subsequently, working organizations in many ways. In this study, we limited ourselves to some of these (bundles of) working conditions and one dependent variable (namely, flow). Flow can be seen as a goal in itself, but it can also have positive consequences for the work results an employee can deliver and, consequently, on how he or she can contribute to organizational performance, including customer satisfaction. Building upon previous scholarly work (Salanova, Agut, & Peiró, 2005; Salanova, Llorens, Cifre, Martinez, & Schaufeli, 2003), the importance of flow for performance was assumed in this research but requires further research in the context of NWW.

The present study has some other limitations as well. First, all data have been collected using fully structured questionnaires opening up the possibility of response set consistencies, although this was reduced by using different data sources. Second, future research using a longitudinal design would be necessary to provide more specific information about the stability and change of the variables, and about cross-lagged (i.e., over time) relationships compared with our

cross-sectional approach (De Lange, Taris, Kompier, Houtman, & Bongers, 2004; Taris & Kompier, 2003). Third, further research is needed to investigate the extent to which our findings would generalize across countries—that is to say, whether they are culturally invariant.

This study also points to a possible venue for further research. Job design theory, including the job demands–resources model, human resource management, and organizational behavior, are fundamental for understanding new work practices and their impact. However, much of the literature in these domains neglects the issue of why a particular practice takes its current form. It does not take into account the processes of implementation and perception by actors on different levels. This calls for more research taking into account the HRM-process model. In addition, neither does the literature fully address the active role that employees at the shop-floor level may play in shaping practices. The results of this study that employees bring their own perceptions of the impact of job design and HRM practices into the equation may suggest a different route of research—research into important questions regarding the social and political processes in the design and management of New Ways to Work. Such research may address important questions (Holman et al., 2005, p. 11): How does the design of new work practices arise? How do employees experience new practices? How are new practices shaped and configured by the various actors? What are the values and objectives of the actors? Do these values conflict and, if they do, how is this expressed?

This study provided answers to some of those questions. This study showed that how employees perceive NWW practices is of vital importance for the amount of flow they may experience at work. The study showed that it is important to make a distinction between implemented practices by line managers and how employees perceive these practices as enhancing certain outcomes. It therefore supported the importance of the use of the HRM-process model when investigating impacts of (novel) HRM practices.

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