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## HR practices for enhancing sustainable employability: implementation, use, and outcomes

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### ABSTRACT

With the aging of the workforce, organizations need to maintain or improve the sustainable employability of their workforce throughout their working life. This raises the question which HR practices increase workers' sustainable employability at work. The aim of this study is to investigate the extent to which organizations implement HR practices for enhancing sustainable employability in terms of workers' health, motivation, and skills and knowledge from the employer's perspective. In total, 312 owners/directors or HR managers (response rate 13%) filled out the questionnaire. The findings showed that most organizations implemented a range of HR practices to improve the health, motivation, and skills and knowledge of their employees. Perceived effectiveness of these practices were dependent on the number of HR practices that were implemented, employees' use of and participation in designing these practices. Implementation of HR practices was also related to higher satisfaction with the current employability of employees, and to increased productivity of the organization. Implications for practice and examples of HR practices to enhance sustainable employability are given.

### KEYWORDS

Employability; sustainability; HR practices; health; work motivation; employers

## Introduction

Only recently, organizations have started to acknowledge the relevance of a sustainable workforce (Pfeffer, 2010). Many industrialized countries are faced with a rapidly aging workforce and a declining availability of young workers (Eurostat, 2016; Toossi, 2012). To prevent possible labor market shortages and to sustain retirement systems, many countries have begun to raise the official retirement

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age (Truxillo, Cadiz, & Hammer, 2015; van Dam, van Vuuren, & Kemps, 2017). As a consequence, employees' careers have extended substantially, and the necessity of investing in employees' sustainable employability (i.e. employability, work motivation, and health) has become apparent (De Vos & van der Heijden, 2015). Many organizations develop HRM policies and actions, and implement practices aimed at increasing workers' sustainable employability at work (Billett, Dymock, Johnson, & Martin, 2011; Semeijn, van Dam, van Vuuren, & van der Heijden, 2015; van Harten, Knies, & Leisink, 2016; Veth, Emans, van der Heijden, Korzilius, & De Lange, 2015). Until now, there is only limited research examining what HR practices employers implement and how effective these practices are.

The goal of this study is to investigate the HR practices organizations use to improve their employees' sustainable employability and to establish the effectiveness of these measures in the eye of employers. HR practices for sustainable employability may depart substantially – in focus, if not in content – from common HR practices that are derived from the organization's strategic targets. Whereas HR practices generally focus on strategic organizational goals, such as getting the right people at the right moment at the right position, HR practices for sustainable employability focus on the long term goal of contributing to employees' sustainable careers, which may unfold inside as well as outside the organization. As sustainable employability is indicated by employability, work motivation and health (Semeijn et al., 2015; SER, 2009), HR practices that promote sustainable employability will have to focus on these characteristics. By increasing our knowledge of these HR practices and their effectiveness, the present study aims to contribute to both research and practice.

### ***Sustainable employability***

Recent developments in the business environment have emphasized the relevance of building a sustainable work force (Mohrman & Worley, 2010; Smith, 2010). Gradually, the view is gaining acceptance that a one-sided focus on a rather short-termed efficient and effective exploitation of natural, social and human resources in organizations is no longer desirable, and should be replaced by a more long-term approach that incorporates the sustainability of these resources (Docherty, Kira, & Shani, 2009; Ehnert, Wes, & Zink, 2014). The concept of sustainability has received increased attention since the publication of the United Nation's Brundtland commission (WCED, 1987), emphasizing the importance of retaining the world's natural resources for future generations. Over time, the notion of sustainability has become associated with a broader range of issues, including economic and social elements. More and more organizations incorporated sustainability as a core strategic value, in order to control the long-term impact of their business on the natural, social and human environments (Dyllick & Hockerts, 2002; Ehnert et al., 2014). Especially in the last decade, the notion

of sustainability has been extended to include sustainable HRM and sustainable employability (Ehnert & Wes, 2012; Pfeffer, 2010).

In the literature, several conceptualizations of sustainable employability (sometimes referred to as sustainable labor participation) can be found (Semeijn et al., 2015). In general, sustainable employability has been defined as the extent to which workers are able and willing to remain working now and in the future (SER, 2009; van Dam et al., 2017; van der Heijden, Gorgievski, & De Lange, 2016). Based on a thorough review of the scientific and management literature, the Dutch Social and Economic Council (SER, a formal advisory board of the Dutch government) has delineated three components of sustainable employability that appear crucial for employees' sustained participation in the labor market, namely employability, work motivation, and health (SER, 2009; van der Klink et al., 2016). Employability refers to employees' ability to adequately fulfill work in their current and future jobs (Fugate, Kinicki, & Ashforth, 2004; Heijde & van der Heijden, 2006), and as such increases their chance of a job on the internal and external labor market (Berntson, Sverke, & Marklund, 2006; Forrier & Sels, 2003; McQuaid & Lindsay, 2005). Work motivation refers to internal and external energetic forces that serve to direct, energize, and regulate work-related behavior. Especially employees' intrinsic motivation is considered to foster employee performance, self-regulation and well-being (Ryan & Deci, 2000). Health has been defined as a 'state of complete physical, mental, and social well-being, and not merely as the absence of disease or infirmity' (WHO, 1948, p. 100). It is generally acknowledged that workers' employability, work motivation, and health are important predictors of future labor participation (Ilmarinen, 2002; Semeijn et al., 2015; van der Klink et al., 2016).

### ***HR practices for sustainable employability***

As the idea of a sustainable workforce derives from the Brundtland commission's definition of sustainability, the promotion of sustainable employability is generally considered a corporate social responsibility (Mazur, 2014; Schuler & Jackson, 2005). Initially, HR practices for enhancing sustainable employability focused on older workers. In 1999, a first European guide was published about good practice in age management (Walker, 1999). Age management concerns those measures that combat age barriers and/or promote age diversity (Naegele & Walker, 2006) with the purpose of maintaining the capability and willingness of workers to remain in work beyond ages at which they previously retired (The Age and Employment Network [TAEN], 2007). Successful aging is likely when workers' employability, motivation and health are maintained now and in the future (Kooij, 2015). Organizations can stimulate older employees' sustainable employability through specific HR practices that focus on maintaining or developing older employees' employability, motivation, and health (Armstrong-Stassen & Ursel, 2009; Herrbach, Mignonac, Vandenbergh, & Negrini, 2009; Kooij, 2010). Studying the impact of different HR practices (relating to the provision of new



roles, flexible work conditions and training), Herrbach et al. (2009) found that the provision of training opportunities in particular resulted in higher affective commitment and lower early retirement among French older employees. Similarly, Armstrong-Stassen and Ursel (2009) noticed that the provision of training practices was related to older employees' intention to stay with the company through enhanced levels of perceived organizational support. In general, HR practices that relate to employee development appear especially beneficial for workers' motivation to postpone retirement (Kooij, 2010; van Dam, van der Vorst, & van der Heijden, 2009). Yet, there is still little knowledge of the other practices that may contribute to employees' sustainable employability.

In the past decade, organizations and policy makers have come to realize that sustainable employability has great relevance for all employees and not just for the older generation (Semeijn et al., 2015; SER, 2009; van Dam et al., 2017). In order to stay in the workforce and become an older worker, it is important that employees work in a competent, motivated and healthy manner, whatever their age, and organizations are encouraged to develop evidence-based HR practices that support their workers' sustainable employability. Research on the relationship between HR practices and sustainable employability at work is scarce. The majority of research on HR practices focuses on the impact of HR practices on employee and organizational performance (e.g. Guest & Conway, 2011; Huselid, 1995). As to date, only a few studies have dealt with the relationship between HR practices and sustainable employability. Veld, Semeijn, and van Vuuren (2015) found that HR practices supporting training, development and mobility were positively related to employability. Dorenbosch (2009) noticed several HR practices that improved employee work engagement, which is often seen as an indication of work motivation (Bakker & Demerouti, 2007). In particular horizontal and vertical mobility activities, internal promotion opportunities, and the provision of development opportunities appeared to benefit employee motivation. Development opportunities also predicted the employability, motivation and work ability of employees of Dutch primary schools (van Vuuren, Caniëls, & Semeijn, 2011). Regarding employee health, several studies noticed that the provision of training and development opportunities, decentralized job design, information-sharing, employment security, and sickness absence policies were associated with employee well-being (Bal, Kooij, & De Jong, 2013; Kroon, van de Voorde, & van Veldhoven, 2009; Peccei, 2004).

### ***The present study***

The aim of this study is to investigate the extent to which organizations implement HR practices for enhancing sustainable employability in terms of workers' skills and knowledge (as a proxy of employability), motivation, and health from the employer's perspective. We focused not only on HR practices for older workers as usual is the case in age management (Naegle & Walker, 2006), but on HR practices for all workers from young to old. Moreover, we examined to what extent

employees actually use the implemented practices, as intended or implemented HR practices may often go unnoticed or remain unused (Gratton & Truss, 2003; Khilji & Wang, 2006; Nishii, Lepak, & Schneider, 2008; Paauwe, 2009; Veth et al., 2015). It seems likely that implemented HR practices will only contribute to positive outcomes if they are actually used. An exclusive focus on the availability of HR practices – rather than their use – could possibly explain why some of these practices, such as the provision of new roles and flexible work conditions, did not impact workers' outcomes in previous studies (Armstrong-Stassen & Ursel, 2009; Herrbach et al., 2009). We also examined whether employees participated in designing and implementing the HR practices. We included employee participation as it has been shown to benefit work effort, job satisfaction and commitment of employees (Scott-Ladd, Travaglione, & Marshall, 2006). We examined how these aspects of HR practices are related to organizational outcomes, including the perceived effectiveness of these practices for improving workers' sustainable employability, satisfaction with the current employability of employees, increased productivity of the organization in the last two years, and sickness absence. These organizational outcomes were chosen because they are important factors for the competitiveness and survival of organizations, and may contribute to the business case for implementing HR practices to improve sustainable employability (Zwetsloot & Pot, 2004).

In addition to HR practices, we included health culture as a covariate in our study. Health culture indicates the strategic value employers place on health and safety (Shain & Kramer, 2004; Zwetsloot & Pot, 2004), and has been found to influence job satisfaction, burnout and sickness absence of employees (Ybema, Evers, & van Scheppingen, 2011). Health culture was included for two reasons. First, if HR practices are embedded in a strong health culture, positive effects of these HR practices are more likely. Second, health culture may be used as a control variable to reduce the impact of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Employers who are positive about their health culture may be more likely to claim both that they implement HR practices and that these HR practices have positive effects. By controlling for health culture, the statistical overlap between HR practices and organizational outcomes which is due to mere positivity of the employer about the own organization is reduced. In this study, we will therefore examine whether implemented and used HR practices contribute to organizational outcomes over and beyond the health culture in the organization.

Although this study is largely exploratory, we do expect that the implementation and use of HR practices, employee participation, and health culture will yield positive outcomes in terms of higher effectiveness, satisfaction with employability, productivity, and lower sickness absence. Finally, we would like to note that we examine the HR practices from the perspective of the employer, emphasizing the intentions and actions of organizations to increase their workers' sustainable employability through HR policies that aim to stimulate their workers' skills and knowledge, motivation, and health.



## Method

### **Participants**

A sample of 2428 organizations was drawn from a database with all organizations with personnel in a province in the Netherlands. The sample was proportional to branch of industry and stratified by size (1–9 employees; 10–99 employees; 100 or more employees). These organizations received an invitation through electronic mail to fill out an internet questionnaire on their policy and practices regarding sustainable employability at work. Approximately two weeks after the invitation, a reminder was sent through electronic mail. In total, 312 organizations responded to the questionnaire (13% response). In return for their participation, the organizations received feedback on their own HR practices compared to other participating organizations of similar size. The questionnaire was generally filled out by the owner or director of the organization (48%) or a HR manager (29%). Of the remaining respondents, 15% had a management position (e.g. plant manager, associate director), 4% had a position as a health and safety expert (e.g. occupational physician), and 4% had a different staff position (e.g. administrator, executive secretary).

### **Questionnaire**

The questionnaire consisted of 69 questions, including questions on the health culture of the organization, HR practices that were taken, the use of these practices, participation of employees, perceived effectiveness of the HR practices, satisfaction with employability of personnel, sickness absence and turnover. The constructs that are used in this study are described below.

#### **Health culture**

Health culture was measured with five items that were adapted from the health policy scale in Ybema et al. (2011). Example items are 'In my organization, health is an important issue in management', 'In my organization, all employees find healthy and safe working behavior important', with answers ranging from (1) fully disagree to (5) fully agree. Cronbach's alpha was .88.

#### **HR practices: implementation and use**

We developed a list of 23 practices concerning health, motivation and skills and knowledge which may improve sustainable employability. These practices were derived from two existing questionnaires, i.e. from the Study on Health at Work (Ybema, Sanders, & De Vroome, 2006) and from a study on employability policies (De Vries, Gründemann, & van Vuuren, 2001). This resulted in a final selection of 23 practices, which focused on health promotion, health curation, motivation, and skills and knowledge. Examples are: 'Facilities at work to stimulate sports or cycling to work, such as a cycle plan, a shower, a dressing room, or a fitness room',

'Adjustment of the workplace to body size or physical complaints', 'Team building, sports days, or active outings for employees', 'Training or following education'. A factor analysis revealed that the first (unrotated) factor loaded positively on each HR practice (factor loadings ranging from .29 to .62). Therefore, the number of indicated HR practices was used as a measure of the implementation of HR practices in the organization. This final scale with all 23 dichotomous items had good reliability ( $KR20 = .81$ ).<sup>1</sup> In the Appendix 1 a list of all HR practices and the percentage of organizations indicating each practice is given.

Participants were asked to indicate the implementation and use of these HR practices in their organization. The instruction for respondents was: 'To what extent does your organization take measures to maintain and promote your employees' health, to maintain and develop their professional skills, and keep them motivated for their work? Please indicate whether your organization takes the following measures (yes or no) – and if so – what part of your employees has used these measures over the past two years'. Use of the practices could only be established for 15 of the HR practices; response scale was (1) (almost) none (0–10% of the employees); (2) less than half (10–40%); (3) approximately half (40–60%); (4) more than half (60–90%); (5) (almost) all (90–100%). The remaining 8 HR practices were either meant for almost all employees, e.g. 'Secure a good indoor environment', or for occasional situations, e.g. 'Excluding or controlling alcohol and drug use'. As the implemented practices differed for each organization, no Cronbach's alpha could be computed for the use of the practices. In the Appendix 1, the use employees made of each of the 15 HR practices is presented.

In addition to these 23 HR practices, participants were asked to describe the practice their organization had taken of which they were most proud. A few of the answers on this question are used at the end of the Results section to illustrate the sustainable employability practices of the organizations in our study.

### ***Participation of employees***

Participation of employees was measured with a newly developed scale of 5 items, based on the influence power continuum of Heller, Drenth, Koopman, and Rus (1977). The five items were: 'Employees receive sufficient information about the HR practices aimed at sustainable employability', 'Employees suggest possible policy practices', 'Employees participate in the implementation or design of HR practices', 'The advice of the employees about the policy practices is taken seriously' and 'Employees determine the content of HR practices'. Answers were on 5-point scales, ranging from (1) fully disagree to (5) fully agree. Cronbach's alpha was .88.

### ***Perceived effectiveness***

Perceived effectiveness of the HR practices was measured with three items that were adapted from the ESENER Management Questionnaire (ESENER, 2009). These items were: 'Do you think the HR practices your organization has taken

are effective in enhancing ... (a) the health of your employees?; (b) the skills and knowledge of your employees?; (c) the motivation of your employees?, with answers ranging from (1) not at all to (5) to a very strong degree. Cronbach's alpha was .81.

### ***Employability satisfaction***

Satisfaction with the current employability of personnel was measured with a scale of 4 items from the Netherlands Employers Work Survey (Oeij, De Vroome, Kraan, Goudswaard, & Van den Bossche, 2013). The items were: 'All in all, how satisfied are you with your personnel regarding their ... (a) broad employability; (b) commitment; (c) flexibility in working hours, (d) willingness to learn', with answers ranging from (1) not at all to (5) to a very strong degree. Cronbach's alpha was .84.

### ***Work productivity***

Change in work productivity was measured with a scale of 5 items from the Netherlands Employers Work Survey (Oeij et al., 2013). Example items are 'In the last two years the work productivity in our organization has ...,' 'In the last two years the satisfaction of our customers has ...,' and 'In the last two years the profit/financial result of our organization has ...,' with answers ranging from (1) strongly decreased, through (3) stayed the same, to (5) strongly increased. Cronbach's alpha was .78.

### ***Sickness absence***

Sickness absence was measured with a single question from the Netherlands Employers Work Survey (Oeij et al., 2013). The items was 'What was the sickness absence percentage in your organization in 2013, excluding maternity leave?'. Participants were asked to give an estimation if they did not know the exact percentage.

### ***Organizational background characteristics***

As research found that governmental, educational and larger organizations implement more HR practices than organizations in the private sector and smaller organizations (Fleischmann, Koster, & Schippers, 2015; De Vries et al., 2001), we included two organizational background characteristics, size and industry, in our study.

### ***Analyses***

The data were analyzed using SPSS 20. In addition to descriptive statistics and correlations, analysis of variance and hierarchical multiple regression analyzes were conducted. As the organizations could skip questions, and not all organizations filled out the full questionnaire, there were some missing values. As a result sample size varied from 251 to 312 for the analyses presented.

## Results

### **Descriptive statistics and correlations**

The participating organizations were approximately evenly distributed across three size groups: 29% had 1–9 employees, 39% had 10–99 employees and 32% had 100 or more employees, and among the four broad branches of industry: 26% agriculture, industry, construction and transport; 25% retail and hospitality services; 20% business services; and 30% public services, education and health care. On average, organizations indicated that they had taken 14 of the 23 HR practices. The percentage of organizations indicating each practice ranged from 25% for support of weight reduction or diet for overweight employees to 89% for securing a good indoor environment. The Appendix 1 lists all HR practices, the percentage of organizations implementing each practice, and the use of these practices by employees.

On average, a little less than half the employees made use of the implemented HR practices. When implemented, the practice ‘support weight reduction or diet for overweight employees’ meant for employees with weight problems was used least. Of the organizations that implemented this practice 57% claimed that less than 10% of their employees made use of this practice. Most used was the practice meant for groups of employees ‘team building, sports days and active outings’. Of the organizations that implemented this practice, 47% claimed that more than 90% of their employees made use of this practice.

Table 1 gives the descriptive statistics and correlations between the variables in our study. The participating organizations were generally positive about their own health culture, on average, organizations implemented 14 of the 23 HR practices, and most organizations reported a moderate degree of employee participation in implementing HR practices, a moderate effectiveness of the HR practices in improving sustainable employability of employees, satisfaction with employability of employees, a slight increase in productivity in the last two years, and a slightly higher sickness absence percentage than average in the Netherlands.

**Table 1.** Descriptive statistics, correlations and reliabilities.

	1	2	3	4	5	6	7	8
1 Health culture	1.00							
2 Implemented HR practices	.24***	1.00						
3 Use of practices	.19**	.12*	1.00					
4 Employee participation	.48***	.16**	.37***	1.00				
5 Perceived effectiveness	.50***	.26***	.40***	.48***	1.00			
6 Employability satisfaction	.31***	.14*	.33***	.40***	.48***	1.00		
7 Productivity	.11	.22***	.19**	.17**	.25***	.24***	1.00	
8 Sickness absence	−.05	−.09	−.16*	.02	−.01	−.06	−.16**	1.00
Mean	4.00	14.02	2.76	3.48	3.48	3.82	3.35	5.36
SD	.70	4.54	.99	.77	.70	.64	.56	9.64
Cronbach's $\alpha$ /KR20	.88	.81	—	.88	.81	.84	.78	—

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .



### **Differences in HR practices by organization size and branch of industry**

Table 2 shows how the health culture, the number of implemented HR practices, the use of the practices, and employee participation differed between organizations of different sizes and branches of industry.

Table 2 shows that organizations in public services (including education and health care) implemented more HR practices ( $M = 16.22$ ) than in other branches of industry,  $F(3, 251) = 6.01, p < .001$ . Other differences between branches of industry were relatively small. With regard to the size of organizations, health culture was stronger in small ( $M = 4.18$ ) than in medium sized ( $M = 3.95$ ) or large organizations ( $M = 3.91$ ),  $F(2, 251) = 5.25, p < .01$ . Nevertheless, large organizations on average implemented more HR practices (16.33) than small ( $M = 12.01$ ) or medium sized organizations ( $M = 13.35$ ),  $F(2, 251) = 10.48, p < .001$ . On the other hand, in small organizations a larger proportion of the employees used the practices that were implemented in the organization ( $M = 3.36$ ),  $F(2, 251) = 22.12, p < .001$ , and employee participation was higher ( $M = 3.89$ ),  $F(2, 251) = 16.98, p < .001$ , than in large organizations (respectively,  $M = 2.47$ , and  $M = 3.27$ ).

### **Differences in organizational outcomes by organization size and branch of industry**

Table 3 shows how the perceived effectiveness, satisfaction with employability of personnel, the change in productivity in the last two years, and sickness absence in the organization differed between organizations of different sizes and branches of industry.

**Table 2.** Health culture and HR practices by branch of industry and size of the organization.

	Health culture	Implemented practices	Use of practices	Employee participation
<i>Branch of industry</i>				
1. Agriculture, industry, construction, transport	3.91(.72)	14.43(3.99)	2.51(.77)	3.33(.74)
2. Retail, hospitality services	3.97(.60)	12.15(4.21)	2.69(1.10)	3.52(.62)
3. Business services	3.96(.82)	12.53(5.18)	3.06(1.11)	3.42(.96)
4. Public services	4.13(.66)	16.22(3.82)	2.86(.92)	3.60(.75)
$F(3, 251) =$	1.92	6.01***	3.19*	3.07*
<i>Size</i>				
1. Small (1–9 employees)	4.18(.67)	12.01(4.36)	3.36(1.24)	3.89(.84)
2. Medium (10–99 employees)	3.95(.72)	13.35(4.24)	2.60(.84)	3.38(.69)
3. Large (100 or more employees)	3.91(.68)	16.33(4.05)	2.47(.67)	3.27(.67)
$F(2, 251) =$	5.25**	10.48***	22.12***	16.98***
Total	4.00(.70)	14.02(4.54)	2.76(.99)	3.48(.77)

Note: Average values are presented with standard deviations in brackets.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 3.** Organizational outcomes by branch of industry and size of the organization.

	Perceived effectiveness	Employability satisfaction	Productivity	Sickness absence
<i>Branch of industry</i>				
1. Agriculture, industry, construction, transport	3.36(.61)	3.56(.63)	3.31(.60)	5.08(4.78)
2. Retail, hospitality services	3.52(.62)	3.90(.57)	3.41(.59)	7.13(18.23)
3. Business services	3.49(.80)	3.92(.58)	3.37(.60)	4.30(4.70)
4. Public services	3.56(.77)	3.92(.69)	3.32(.47)	4.89(2.90)
<i>F</i> (3, 246)=	2.22	4.40**	.71	1.07
<i>Size</i>				
1. Small (1–9 employees)	3.84(.74)	4.07(.77)	3.33(.61)	7.51(17.85)
2. Medium (10–99 employees)	3.44(.60)	3.87(.57)	3.33(.59)	4.38(3.86)
3. Large (100 or more employees)	3.27(.69)	3.58(.52)	3.38(.49)	4.83(2.35)
<i>F</i> (2, 246)=	14.95***	11.51***	.93	2.51
Total	3.48(.70)	3.82(.64)	3.35(.56)	5.36(9.64)

Note: Average values are presented with standard deviations in brackets.

\*\**p* < .01; \*\*\**p* < .001.

Table 3 shows that satisfaction with employability of personnel was lower among organizations in agriculture, industry, construction and transport ( $M = 3.56$ ) than in the other branches of industry ( $M = 3.91$ ),  $F(3, 246) = 4.40$ ,  $p < .001$ . Other differences between branches of industry were small and nonsignificant. With regard to the size of organizations, small organizations considered the perceived effectiveness of the HR practices ( $M = 3.84$ ),  $F(2, 246) = 14.95$ ,  $p < .001$ , and the employability of personnel ( $M = 4.07$ ),  $F(2, 246) = 11.51$ ,  $p < .001$  as higher than large organizations (respectively,  $M = 3.27$ , and  $M = 3.58$ ). Changes in productivity and sickness absence did not differ significantly between organizations of different size.

### **Organizational outcomes and HR practices**

The relationship of organizational outcomes of the HR practices were examined by analyzing the perceived effectiveness, satisfaction with employability of personnel, the change in productivity in the last two years, and sickness absence in the organization. In hierarchical multiple regression analysis, the relationship of these variables with organization branch and size (step 1), the health culture of the organization (step 2), and the number of implemented HR practices, the use of these practices, and participation of employees (step 3) were examined. The results of steps 2 and 3 of these regression analyses are presented in Table 4.

#### **Perceived effectiveness**

With regard to perceived effectiveness of the HR practices the organization implemented, step 2 in the regression shows that organizations with a strong health



**Table 4.** The regression of organizational outcomes on health culture (step 2), and HR practices in the organization (step 3), corrected for branch of industry and size of the organization (step 1, not shown). Standardized regression coefficients are presented.

Step		Perceived effectiveness	Employability satisfaction	Productivity	Sickness absence
2	Health culture	.43***	.24***	.12	-.08
	Total $R^2$	.30	.20	.03	.04
	F (6, 242)	16.99***	10.12***	1.03	1.71
3	Health culture	.28***	.10	-.01	-.09
	Implemented HR practices	.20***	.14*	.20**	.00
	Use of HR practices	.19**	.13*	.18*	-.26***
	Employee participation	.17**	.22***	.13	.09
	Total $R^2$	.41	.29	.12	.09
	F (9, 239)	18.20***	10.82***	3.54***	2.71**

Note: Total  $R^2$  includes the influence of branch of industry and size of the organization in step 1.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

culture considered their HR practices as more effective than organizations with a weaker health culture ( $\beta = .43, p < .001$ ). In step 3, the HR practices variables were entered. The effectiveness of HR practices was regarded as higher as organizations reported more implemented HR practices ( $\beta = .20, p < .001$ ), higher use of these practices ( $\beta = .19, p < .01$ ), and more participation of employees in the implementation of HR practices ( $\beta = .17, p < .01$ ). As much as 41% of the variance in the perceived effectiveness of HR practices in improving sustainable employability was explained by organization size, branch, health culture, and the implementation of HR practices.

### ***Employability satisfaction***

With regard to satisfaction with the current employability of personnel, step 2 in the regression showed that the satisfaction with personnel health culture contributed to the regression of employability satisfaction: organizations were more satisfied with employability of their personnel as the health culture in the organization was stronger ( $\beta = .24, p < .001$ ). When considering the relationship with implementation of HR practices in step 3, it was found that satisfaction with personnel's employability was higher as organizations reported more implemented HR practices ( $\beta = .14, p < .05$ ), as these practices were used more often ( $\beta = .13, p < .05$ ), and as employees participated more in the implementation of HR practices in the organization ( $\beta = .22, p < .001$ ). The contribution of health culture was no longer significant ( $\beta = .10, \text{ns}$ ), showing that employability satisfaction was more strongly related to the implementation of specific HR practices than to the general health culture of the organization. A substantial part of 29% of the variance in the satisfaction with employability of personnel was explained by organization size, branch and the implementation of HR practices.

### ***Change in productivity***

Changes in productivity in the last two years were unrelated to health culture in step 2 of the regression ( $\beta = .12$ , ns). In step 3, a higher number of implemented HR practices ( $\beta = .20$ ,  $p < .01$ ) and higher use of these practices by employees ( $\beta = .18$ ,  $p < .05$ ) were related to more productivity growth in the last two years. Twelve per cent of the variance in productivity change was explained by organization size, branch and implementation of HR practices.

### ***Sickness absence***

Sickness absence was unrelated to health culture in step 2 of the regression ( $\beta = -.08$ , ns). In step 3, sickness absence was found to be higher among organizations in which employees made little use of the HR practices that were implemented by the organization ( $\beta = -.26$ ,  $p < .001$ ). Nine per cent of the variance in sickness absence was explained by organization size, branch and implementation of HR practices.

### ***Examples of HR practices to enhance sustainable employability at work***

At the end of the questionnaire, participating organizations described what HR practices to improve sustainable employability they were most proud of. Below, we give a small selection of the mentioned practices:

‘Every employee makes a personal development plan, which then results in a team development plan’ (A large organization in health care).

‘Development tracks are designed to increase expertise, through which employees can grow and reach higher positions in the organization’ (A large organization in industry).

‘Employees are stimulated to provide ideas for improvement continually’ (A large organization in industry).

‘We care for a collegial climate, with flexible collaboration, trading work schedules and taking over one another’s work when necessary, while keeping an eye on each other’ (A medium sized organization in trade).

‘The NES Health Energy scan provides insight in physical and emotional action points. Employees become aware of physical and emotional problems and receive help or coaching to actively deal with these problems. People start to take responsibility for their health and behavior’ (A small organization in business services).

‘Every new employee receives intensive support from a coach. The coach is 24/7 available for the new employee’ (A medium sized organization in transport).

### ***Discussion***

This study among a heterogeneous sample of employers showed that organizations implemented a broad range of HR practices to improve the health, motivation, and skills and knowledge of their employees. The main findings were that employers regarded the HR practices they implemented as more effective in increasing



sustainable employability of employees as they implemented a larger number of the examined HR practices, as more employees used the implemented practices and participated in designing these practices. Implementation of a larger amount of the HR practices was also related to higher satisfaction with the current employability of employees, and to increased productivity of the organization. Our study indicates that a broad range of HR practices aimed at health, motivation and employability contribute to sustainable employability of personnel, at least in the eyes of the employers. This finding expands earlier evidence that HR practices focused at employee development are related to higher work performance, work motivation, and employability of (mainly older) personnel (Armstrong-Stassen & Ursel, 2009; Herrbach et al., 2009; Kooij, 2010; van Dam et al., 2009). An important contribution of our study to the more general HR literature is that the perceived effectiveness of HR practices in improving employees' sustainable employability (i.e. health, employability and motivation) is examined. These issues are seldom addressed in research. Whereas extensive research has focused on the impact of work and job design (for an overview, see Parker, 2014), studies focusing on the effectiveness of actual practices that organizations have developed are still scarce. Furthermore, we examined how this perceived effectiveness is related to characteristics of the implementation of HR practices.

Moreover, our study points at two factors that contribute to the effectiveness of these HR practices: the actual use employees make of implemented practices and their participation in designing these practices. It is important that employers implement HR practices that fit the needs and wishes of employees, and actively promote and communicate the available HR practices. Indeed, HR practices can only be effective if employees actually make use of these practices. Our study confirmed earlier studies that demonstrated the importance to investigate the actual use of the implemented practices (Gratton & Truss, 2003; Khilji & Wang, 2006; Nishii et al., 2008; Paauwe, 2009; Veth et al., 2015). All organizational outcomes in our study were related to the use employees made of the implemented policy practices, including higher satisfaction with employability of employees, increased productivity, and lower sickness absence. Moreover, employee participation in designing the HR practices was also related to higher satisfaction with employability of employees. This is in line with the outcomes of earlier research on the relationship between employee participation and work effort, job satisfaction and commitment of employees (Scott-Ladd et al., 2006).

We included a heterogeneous sample of employers with organizations of different sizes and branches of industry. As a result, we can generalize our findings to a broad range of companies. Moreover, this heterogeneous sample made it possible to examine the differences between organizations of different sizes and branches of industry. We found that large organizations implemented more HR practices than small and medium sized organizations. Large organizations may have more financial capacity and manpower to implement a broad range of practices, whereas small organizations need to focus on a more limited set of practices.

However, small organizations reported more use of implemented practices, more participation of employees, and a stronger health culture than large organizations. Moreover, in line with these differences in implementation of HR practices, small organizations reported higher effectiveness of the HR practices in improving sustainable employability, and higher satisfaction with current employability of employees. It is intriguing why small organization appear to be more successful in their HR policy and practices than larger organizations despite their more limited resources. Perhaps, small business owners have more direct contact with their personnel, and as a result invest only in HR practices that are really wanted and necessary. Such a tailored approach is probably more effective in improving sustainable employability than a standardized broad-range supply of HR practices provided by large organizations (Nielsen & Randall, 2013; van der Heijden, van Vuuren, Kooij, & de Lange, 2015). With regard to branch of industry, organizations in public services, education and health care invested more in sustainable employability, and stimulated more employee participation than organizations in the private sector, although the use of HR practices was highest in business services.

These findings are comparable with earlier research on the influence of organization level variables on the implementation of HR practices. De Vries et al. (2001) found that employability policies were more present in governmental, educational and larger organizations than in organizations in the private sector and in smaller organizations. Mykletun, Furunes, and Solem (2012) noticed only a modest role of organization level variables in explaining the beliefs of managers about measures for extending senior workforce careers, which might be due to their restricted sample of managers in public service sector organizations (municipality, county and public health institutions). The findings of Fleischmann et al. (2015) with regard to employability policies for older workers confirmed that larger organizations implement more employability practices. Fleischman et al. explained that the marginal costs of the investment in workers' employability decrease with the size of the organization. They also found that the average tenure in the organization is positively related to the implementation of employability practices. Possibly, the provision of employability practices will be less costly and result in greater pay-offs in organizations with a more tenured workforce. This could explain our findings that governmental and educational organizations implemented more HR practices than organizations in the private sector. Dutch governmental and educational organizations have in general a workforce with longer tenure than organizations in the private sector (Ministry of Interior & Kingdom Relations, 2013).

This research has a number of strengths and limitations that need to be mentioned. A notable strength is that we examined the HR practices in a heterogeneous sample of organizations of different sizes and branches of industry. In particular the participation of a substantial number of small and medium sized organizations can be considered a strength of our study, as most organizational research is done exclusively among large organizations. Our heterogeneous sample enables generalization of the interrelationships between the HR practices and their

outcomes. Another strength of our study relates to the fact that we examined this issue from the perspective of the employer, as this nicely complements research focusing on the perspective of employees (e.g. Ybema et al., 2011). Examining HR practices and their outcomes from the employers perspective is highly important. Employers have a strong interest in maintaining the health, motivation and employability of their personnel, both old and young. Otherwise sickness absence, turnover and productivity loss may lead to high costs and lower organizational performance. Moreover, the employer decides whether and how to invest in HR practices focused on health, motivation and employability. If employers do not regard these practices as effective, they are unlikely to implement such practices.

A limitation of our research is that the employer was the sole source of information, both for the nature of the HR practices and the organizational outcomes. Common method variance (Podsakoff et al., 2003) may have inflated the correlations found in our study, and future studies should supplement reports from employers with those of employees and file data. The finding that the implemented HR practices contributed to higher organizational outcomes over and above health culture indicates that it is unlikely that common method variance is the sole cause of our findings, and increases our trust in the validity of our results. Still, we cannot rule out the possibility that employers may be more positive about their own investments in sustainable employability than employees would have been, and it would be interesting to examine the extent to which perceptions of employers and employees on this policy converge.

A second limitation is the cross-sectional design of our study, which precludes causal conclusions from our results. Indeed, the causal flow may also go the other way, from organizational outcomes to the implemented HR practices of organizations. Organizations with increased productivity may be more likely to have the financial reserve to implement HR practices, and organizations who perceive their HR practices as effective in improving sustainable employability may be likely to increase their investments in HR practices. This means that investments in the HR practices may be reciprocally related to organizational outcomes, leading to a virtuous circle in which successful organizations invest in sustainable employability of employees, which further increases the likelihood of success. Additional longitudinal and quasi-experimental research on the implementation and effects of HR practices is needed to gain more insight in the actual effectiveness of these practices in improving sustainable employability of employees.

A final limitation is the low response rate among organizations. Although low response rates are common in organizational research (Baruch & Holtom, 2008), it limits the generalizability of our results. Participating organizations are likely to be more interested in sustainable employability than those who did not respond to our invitation, which means that organizations which do not invest in sustainable employability of their personnel are likely to be underrepresented.

Practical implications of our findings are that organizations could improve the health, motivation and employability of personnel either by implementing a broad range of HR practices or by focusing on a few well-chosen practices that are really needed and used by their employees. We believe that the latter strategy will generally be more effective and cost-efficient than the former. Nevertheless, especially in larger organizations, a broad range of HR practices may be necessary to address the diverging needs of a heterogeneous employee population. Employee participation in deciding on and implementing relevant HR practices seems important as well, as it may increase the awareness of the availability and benefits of the practices, improve the fit between the practices and the needs of employees, and support the use and acceptance of these practices among employees.

We would like to conclude that investing in the sustainable employability of employees seems highly beneficial for organizations. Implementing HR practices can bolster the health, work motivation and skills and knowledge of employees, and can result in improved employability, higher productivity, and lower sickness absence. To achieve these results, it is highly important that employees actually make use of the HR practices, and that employees participate in designing and implementing these practices. Although sustainable employability mainly got attention due to the aging work force, we want to emphasize that it is important for all employees. Young employees may also leave the workforce due to problems with the ability, motivation, or opportunity to work. To make staffing future proof, older and younger workers should be encouraged and facilitated to work healthy, to increase their skills and knowledge, and to remain motivated for their current and future work (van Dam et al., 2017).

### Note

1. In homogeneous scales, items with factor loadings below .40 are often removed. In our measure, 7 items had a factor loading below .40. However, we retained all 23 items in our measure because we regard the measure of implemented HR practices primarily as an index rather than as a homogeneous scale. Implementation of a certain practice is not necessarily correlated with implementation of other practices, but may depend on the specific circumstances in the organization. Additional analyzes showed that employing a measure consisting of the 16 HR practices with a factor loadings  $>.40$  yielded largely similar results as those presented here.

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## Appendix 1. Percentage of organizations implementing each HR practice, and use of implemented practices by employees

Implemented HR practice	Use by employees					(Almost) all (90–100%)
	(Almost) none (0–10%)	Less than half (10–40%)	Approximately half (40–60%)	More than half (60–90%)		
Securing a good indoor environment	89%	–	–	–	–	–
Training or following education	88%	9%	29%	22%	20%	20%
Adjustment of the workplace to body size or physical complaints	83%	30%	27%	10%	14%	19%
Attention to physical and mental health of employees in performance appraisals	81%	13%	18%	18%	22%	29%
Keeping a good balance between work and home	77%	–	–	–	–	–
Reduction of (passive) smoking	77%	–	–	–	–	–
Prevention of or coping with high work demands or job stress	74%	–	–	–	–	–
Task enlargement	73%	16%	33%	25%	13%	14%
Conditions of employment to facilitate combining work and care	71%	–	–	–	–	–
Extra support for employees with a handicap or chronic disease	70%	51%	22%	3%	9%	16%
Team building, sports days, or active outings for employees	66%	2%	11%	11%	28%	47%
Intervision or coaching	62%	24%	29%	15%	12%	21%
Prevention of bullying or exclusion	59%	–	–	–	–	–
Excluding or controlling alcohol and drug use	58%	–	–	–	–	–
Adjustment of the job to personal interests of employees	57%	16%	24%	22%	20%	19%
Career counseling	55%	28%	34%	9%	15%	15%
Facilities at work to stimulate sports or cycling to work, such as a cycle plan, a shower, a dressing room, or a fitness room	55%	22%	48%	17%	9%	4%
Stimulating continued employment for older workers	41%	–	–	–	–	–
Job circulation, secondment or internship in or outside the organization	41%	31%	36%	13%	13%	8%
Stimulate healthy food (e.g. healthy food at the canteen, free fruit or salads)	37%	13%	23%	17%	21%	25%
Corporate fitness or discount at a gym	33%	36%	52%	4%	5%	2%
Offering a health check to employees	32%	31%	26%	17%	14%	12%
Support weight reduction or diet for overweight employees	25%	57%	25%	1%	6%	10%