
ECONOMICS

Sociology

Lulewicz-Sas, A., Kinowska, H., & Fryczyńska, M. (2022). How sustainable human resource management affects work engagement and perceived employability. *Economics and Sociology*, 15(4), 63-79. doi:10.14254/2071-789X.2022/15-4/3

HOW SUSTAINABLE HUMAN RESOURCE MANAGEMENT AFFECTS WORK ENGAGEMENT AND PERCEIVED EMPLOYABILITY

Agata Lulewicz-Sas

*Warsaw School of Economics,
Warsaw, Poland*

E-mail: agata.lulewicz-sas@sgh.waw.pl

ORCID 0000-0002-5415-2523

Hanna Kinowska

*Warsaw School of Economics,
Warsaw, Poland*

E-mail: hanna.kinowska@sgh.waw.pl

ORCID 0000-0002-7936-97373

Marzena Fryczyńska

*Warsaw School of Economics,
Warsaw, Poland*

E-mail: marzena.fryczynska@sgh.waw.pl

ORCID 0000-0001-5882-7017

Received: March, 2022

1st Revision: August, 2022

Accepted: December, 2022

DOI: 10.14254/2071-
789X.2022/15-4/3

JEL Classification: M52,
M54, Q56

ABSTRACT. There are only a few fragmented studies available on the relationship between engagement, employability and sustainable HRM practices. This research gap justifies the investigation of a relationship between these constructs. The research findings presented in this article, to the authors' knowledge, are the first to simultaneously address Sustainable Human Resource Management, Work Engagement and Perceived Employability. The aim of this research is to identify the impact of Sustainable HRM on Work Engagement and Perceived Employability. A quantitative study was conducted among employees to test the model of the relationship between mentioned above variables. The purposive-quota sampling was chosen to survey representatives of organisations with a minimum of 10 employees. The survey was conducted on a survey panel accredited by PKJPA and ESOMAR using the CAWI platform. The results confirm a strong correlation between Sustainable HRM and Work Engagement, as well as a moderate influence of Sustainable HRM on Perceived Employability. Further research would need to delve deeper into the impact of specific Sustainable HRM practices on Work Engagement and Perceived Employability. It would be worth extending the research to include other types of commitment like organisational attachment, and to include determinants in the analysis of Perceived Employability.

Keywords: sustainable human resources management, perceived employability, work engagement

Introduction

Sustainable human resource management (SHRM) was first introduced more than 15 years ago (Kramar, 2022) and is considered the next stage of strategic HRM development (de Souza Freitas et al., 2011). The concept uses human resource management (HRM) tools to embed a sustainable firm strategy and create a human resource management system for improving the firm's performance (Cohen et al., 2012a). Sustainable HRM advocates respect

for the employed workers and a way of organising work that protects, sustains and regenerates human resources and thus contributes to the long-term performance of the organisation (Ehnert et al., 2014). It aims to achieve two opposing key objectives: on the one hand, to fully utilise the potential of employees in order to improve business performance, and on the other hand, to attract and retain human resources, which involves a development-oriented, regenerative approach to human resources that takes into account the health and well-being of employees (Ehnert, 2009).

Sustainable HRM is by definition oriented towards achieving long-term results (Ehnert & Harry, 2012), indicating that the focus should be on securing the suitability of employees to also do their jobs in the future. Nevertheless, as research indicates (Macke & Genari, 2019), tensions and paradoxes become apparent when considering long-term prospects of sustainable HRM shaping the long-term sustainability of organizational performance, with focus on cost reduction and corporate profitability (in the short-term), which heralds a rift between the concept and practice of sustainable HRM. Hence, we undertake research to answer the question of sustainable HRM's impact on work engagement and perceived employability.

The need to undertake research on sustainable human resource management, work engagement and perceived employability is also confirmed by the conducted bibliographical analysis, which showed that no research related to these three issues has been conducted so far. The bibliographic analysis showed that there have been few studies on sustainable human resource management and work engagement. The problematic articles on this topic are oriented around methods of measuring employee work engagement (Xu et al., 2020), work engagement and quality under the conservation of resources theory and the job demands-resources model (Wang & Tseng, 2019), relationship between high-commitment work systems and the employees' taking charge behaviours (Li et al., 2019), examine decent work (Kashyap & Arora, 2020), conceptual model of characteristics of remuneration systems (Radvila & Silingiene, 2018), generational (age cohorts) effect on subjective wellbeing at work (Smaliukiene & Bekesiene, 2020).

The literature also describes isolated studies on sustainable human resource management and perceived employability. They concern relationships between workers' chronological age and dimensions of self-reported employability (Peters et al., 2019), needs of graduates and graduate employers, which can be competitive or complementary in nature (Donald et al., 2020), students' perceptions of their future careers (Donald et al., 2018), the relationship between HRM perception of practices and objective career success (Giancaspro et al., 2021), and sustainable careers (De Vos & Van der Heijden, 2017).

Academic interests also include work engagement and perceived employability. research in this area concerns volition and self-efficacy as antecedents, work engagement and job satisfaction as outcomes of perceived employability (Ngo et al., 2017), relationships between perceived employability and employee well-being (work engagement) (Alpler & Arasli, 2020), workplace incivility to employee work engagement (i.e., vigour, dedication, and absorption) through job insecurity (Guo et al., 2022), and the role of calendar age and proactive personality in the relationships between developmental opportunities, on the one hand, and work engagement and self-perceived employability, on the other (Van der Heijden et al., 2015).

Based on the analysis, that there are only few, fragmented studies available in the literature on the relationship between engagement and perceived employability and sustainable HRM practices. Thus, there is a gap in research on the link between comprehensive SHRM practices and employee engagement and perceived employability. This means there is a need for research on the relationship between these constructs. As far as the authors are aware, the research findings presented in this article are the only research simultaneously encompassing sustainable human resource management, work engagement and perceived employability.

The aim of this paper is to identify the impact of sustainable HRM on employee engagement and perceived employability. To do this, we will present the concepts of sustainable HRM, work engagement and perceived employability and the relationship between them documented in research papers. We will then describe the quantitative research conducted and the results of the statistical analyses and discuss them in the light of the stated aim, hypotheses and results obtained by other authors.

1. Literature review

1.1. Sustainable human resources management

Since the beginning of the 21st century, the concept of sustainable human resource management has become a new and important approach to managing people in the work process. It responded to the need for organisations to engage in sustainable development (Podgorodnichenko et al., 2020; Visser & Brundtland, 1987). Starting from the definition of sustainability, sustainable HRM is defined in literature as the adoption of HRM strategies and practices that enable the achievement of economic, social and environmental goals, with impact inside and outside the organization and in the long term, while controlling unintended side effects and negative feedbacks (Ehnert et al., 2016). According to A. Pabian, the essence of sustainable human resource management is to plan and attract employees and to influence them in such a way that they achieve economic, environmental and social goals in the company, thus contributing to balancing intergenerational needs (Pabian, 2017). S. Mariappanadar, in turn, defines sustainable human resource management as the management of human resources to meet the optimum needs of the organisation and the present community without compromising the ability to meet the needs of the future (Mariappanadar, 2003). Sustainable HRM promotes a more holistic view emphasising the ability of HRM to engage with the sustainability agenda from multiple perspectives to meet the needs and interests of the organisation's various internal and external stakeholders (Järlström et al., 2018). According to E. Cohen, S. Taylor and M. Muller-Camen, sustainable HRM: (1) supports the organisation's sustainability strategy, (2) emphasises fair treatment, development and well-being of employees, (3) contributes to building employees' skills, values and confidence and increases their commitment to sustainability, (4) focuses on internal (employees) and external (all stakeholders in the organisation) stakeholders, and (5) supports environmentally friendly organisational practices (Cohen et al., 2012b). Sustainable HRM is supposed to counteract the exploitation of employees' human capital (Ehnert & Harry, 2012), which means working to maintain and even more to develop the knowledge, skills, attitudes and also the physical condition of each employee, while engaging them in work for results.

The concept of sustainable HRM is still evolving. Other concepts have already taken shape on the basis of this concept: green HRM (Aust et al., 2020; Bombiak & Marciniuk-Kluska, 2018; Jabbour, 2011; Kramar, 2014; Zoogah, 2011), socially responsible HRM, also referred to in literature as ethical HRM (Greenwood, 2013; Shen & Jiu Hua Zhu, 2011), triple bottom line HRM (Bush, 2020; De Prins et al., 2014; Elkington, 1994) and common good HRM (Aust et al., 2020; Frémeaux & Michelson, 2017; Hoffman & Shipper, 2018; Hollensbe et al., 2014). The aforementioned concepts are an integral part of sustainable HRM, with varying degrees of emphasis on sustainability dimensions. According to I. Ehnert and W. Harry, new diverse rival approaches in this area can be expected (Ehnert & Harry, 2012).

1.2. Work engagement

Work engagement is conceptualised in many ways (Christian et al., 2011; Juchnowicz, 2012; Kinowska, 2009; Lewicka, 2019; Shuck & Wollard, 2010; Simpson, 2009). It refers to attitudes in the workplace, principally job involvement, organizational commitment and professional commitment, and work engagement.

Work engagement is defined as a type of attitude towards work (Juchnowicz, 2012). It consists of three components: cognitive, emotional and behavioural. The attitude of commitment requires the employee to have knowledge about the organisation, positive feelings towards it, and acceptance of its values, goals, leaders' behaviour and action. An engaged employee focuses on tasks, performs them with passion and enthusiasm, has a positive attitude towards the organisation - or work - and takes actions that are in the interest of the company (Juchnowicz, 2012).

Another approach is to define work engagement as the attachment of employees to the organisation or their professional roles (Kahn, 1990). It is manifested by a physical, cognitive and emotional connection to the company or profession. An uncommitted employee distances himself or herself from his or her organisation or professional role, cutting himself or herself off physically, cognitively and emotionally. In this approach, commitment focuses on the psychological relationship between the employee and the organisation or role. It is divided into an organisational attachment and professional attachment. The former is the employee's attitude resulting from positive social exchange in the workplace. It can be considered in different relationships, e.g., towards the organisation, the team or the supervisor. Professional attachment refers to commitment to a profession, i.e. a specific activity that requires a specific set of competencies and conduct in accordance with the requirements of the profession (Meyer, 2016).

Engagement is also defined as a state of mind, positively related to work. It is characterised by a high energy level, dedication, passion and full concentration on work (Schaufeli et al., 2002). It consists of three components: vigour, dedication to work and preoccupation with work. The first refers to high levels of energy, enthusiasm, perseverance and willingness to work even in the face of difficulties (Bakker & Schaufeli, 2008). The second refers to a strong identification with one's work, with a sense of meaning, significance and pride. The third manifests itself in concentration on one's work and difficulty in detaching from it. The positive - work-related - state of mind characterised by vigour, dedication and absorption by one's role, in order to be considered as engagement, cannot be a temporary state. Work engagement is constant, unfocused on any particular object, event or behaviour.

Committed employees have high energy levels and good health. They are more willing to work outside of set hours. They feel greater job satisfaction (Schaufeli et al., 2008). The benefits of engagement relate to both the organisation (Saks, 2006) and the employees. They make them happier (Schaufeli et al., 2008).

Research suggests that work engagement is one of the key outcomes of sustainable human resource management practices (Parakandi & Behery, 2016).

Employee engagement is an important factor in driving growth and competitiveness. Researchers of this issue are interested in the result of changes in the conditions in which organizations function, especially concerning the labour market and employees' needs. For this reason, competing for human resource means actively seeking employees. Work becomes an environment in which individuals seek meaning and engage in various types of activities. High competitiveness leads to the necessity of creating conditions enabling employees to achieve above-average results, improve processes and adopt innovative attitudes. Employee engagement is a prerequisite for meeting contemporary organisational challenges (Lewicka, 2019).

1.3. Perceived employability

Employability is meaningfully associated with career success, sustained employment, personal marketability, or attractiveness in the labour market (Williams, 2015). Employability is defined in literature in different contexts and approaches. It is emphasised that it is the ability of a person to make a difference in the labour market (Vanhercke et al., 2014). From the point of view of competence, employability is the continuous realization, acquisition and creation of work through the optimal use of a person's competences (Heijde & Heijden, 2006). This is an individual approach to employability, also developed by M. Fugate (2006), who identifies dispositional employability, i.e. a set of individual characteristics that build predispositions for proactive adaptation to work and career changes. Perceived employability, on the other hand, also takes into account the context of the current workplace, job availability and labour market conditions. This is employees' perceptions of their chance of a job in the internal and external labour market (Forrier & Sels, 2003). This view of employability was developed by A. Rothwell and J. Arnold (2007), emphasising the quality of the job as congruent with intentions. In this paper we take as Vanhercke et al. (2014) that perceived employability is the individual's perception of his or her possibilities of obtaining and maintaining employment. Perceived employability is a property that individuals identify and assess. Evaluation of employability is a result of assessment of individual characteristics, abilities, and motives, i.e., competences which influence suitability to perform a job. At the same time, an individual's self-assessment takes into account the external context, namely the previous jobs and the situation on the labour market, as the assessment of the chances and opportunities of keeping and finding a new job also depends on structural factors (Vanhercke et al., 2014).

1.4. Impact of sustainable HRM on work engagement and perceived employability

Sustainable development requires balancing potentially conflicting economic, social and environmental objectives. It implies a holistic approach to SHRM and the need for sustainable practices. Research suggests that achieving sustainability goals is supported by SHRM practices that focus on employee dignity (Arnaud & Wasieleski, 2014). In literature, research can be found that employee-centred interactions (e.g. empowerment and job enrichment) support employee self-actualisation, self-determination and dignity, and also help the organisation to achieve its sustainability goals (targeting the environment, customers and community) (Podgorodnichenko et al., 2020).

Economic, social and environmental goals, which are the essence of sustainable development, are achieved through motivated, committed and dedicated employees who are willing to take action to achieve them. Research confirms that this is made possible by treating employees in a sustainable and responsible manner, in particular by incorporating a long-term perspective into employee relations (Becker, 2011).

Research indicates that the HRM practices that support positive employee attitudes also promote 'green' behaviour. In organisations with sustainable practices, employees are more likely to be committed to achieving organisational environmental goals and less likely to sabotage them (Harvey et al., 2013). The research available in literature suggests that the green practices of HRM, represented by environmental training, work-life balance support, attention to employee health and safety, and initiatives that influence employee engagement, modify the relationship between environmental management and financial performance (O'Donohue & Torugsa, 2016). Practices that improve employee motivation and engagement have the potential to improve both environmental and financial performance (Bučiuniene & Kazlauskaite, 2012).

Based on literature analysis, the following hypothesis was formulated:

H1. Sustainable HRM has a strong positive impact on work engagement

By addressing the problem of perceived employability we fit into the initial concept of sustainable HRM, which assumes that one of the three pillars is increasing the employability of employees. The other two pillars are aimed at SHRM activities that increase work-life balance and personal autonomy in professional development of workers (Zaugg et al., 2001). Also the third component of the ROC model (Respect-Openness-Continuity) describing sustainable HRM includes a long-term perspective of HR activities (De Prins et al., 2014). The long-term perspective corresponds to sustainable work priorities in the EU (Eurofound, 2021), focused on supporting workers to engage with and stay in work throughout an extended working life. Employability is the ability to perform not only current but also future work activities. Future-oriented sustainable HRM translates all the more into enhancing the employability of the working population.

In this article, the focus is on the variability of perceived employability depending on the organisational context. Perceived employability is determined by the conditions that employers offer in the workplace (Van der Klink et al., 2016). A job that places a physical and mental strain on the employee limits the ability to retain, and particularly to obtain a new job. While work in itself can be highly taxing, the management system and especially the HRM policies and practices are not insignificant. If sustainable HRM focuses on the implementation of sustainable development principles and uses labour resources in a way that does not limit their future growth potential, it has a positive impact on employability.

HRM is aimed at achieving intra-organisational outcomes, i.e. increasing work productivity, customer satisfaction and organisational financial profits (Ybema et al., 2020). In view of sustainable development goals, HRM supports the achievement of these goals, while maintaining ethical values and securing social, economic and environmental benefits at the same time. In contrast, in their pioneering work Forrier and Seles (2003) perceived employability is the perception of job opportunities in the internal or external labour market, with the internal labour market being the current job and the external labour market being available jobs with other employers and the market more broadly. There is some ambiguity here. Sustainability policy and practice mainly targets current employees and aims to retain all effective employees. This may mean that sustainable HRM practices will be offered that only increase the internal employability of employees and thus support the achievement of intra-organisational goals. As a result, this may undermine the overall impact on perceived employability.

Taking care of perceived employability of employees is linked to the goals of sustainable HRM (Karman, 2020; Stankevičiūtė & Savanevičienė, 2018). Increasing employability is mainly the responsibility of one of the HRM functions namely employee development. Employees increase their employability if they have the opportunity for training that is also valuable on the labour market, as well as self-development that does not threaten the loss of the organisation's intellectual capital. It is also important to perform such work that increases the chances of further, more valuable work and secures conditions for employees to build networks and professional relationships (Stankevičiūtė & Savanevičienė, 2018).

In the context of increasing perceived employability, it is particularly important to offer training to employees, especially those around retirement age (de Grip et al., 2020), which corresponds to the pillars of long term perspective of sustainable HRM. This is supported by the results obtained by Veld, Semeijn, and van Vuuren (2015) in a study among primary school employees. They indicate that organisational HR practices supporting training, development and mobility, as well as the preferences of employees in this respect, increase their perceived

employability. Also, career management as a subprocess of sustainable HRM strengthens health, improves job satisfaction and ensures productivity, which is closely related to employability (De Vos et al., 2020).

In this article we address the issue of increasing perceived employability through sustainable HRM in organisations. However, HR practices are also examined as factors that enhance sustainable employability. HR practices affecting health, motivation, skills, and knowledge of employees are closely related to increasing sustainable employability. This impact is greater in organisations the more widely these practices are followed by employees, even if the number of practices is not very large (which is particularly evident in small organisations). Research has confirmed that sustainable HRM and the creation of sustainable employability takes place with the active participation of employees (Ybema et al., 2020).

An employee's perception of their employability as high versus looking for a new job and specifically deciding to leave to go to another employer are two different issues. The latter can be problematic for an employer, especially when it concerns valuable employees. Nevertheless, only when the employee has a disengaged career orientation does their external employability prompt them to leave the current employer (Baranchenko et al., 2020).

However, if sustainable HRM fits into the common good concept and also achieves social goals external to the organisation (Aust et al., 2020), then perceived employability, whether targeted at the internal or external labour market, will be determined by sustainable HRM.

As a result, we assume that perceived employability is dependent on sustainable HRM, nevertheless, this influence may also depend on other factors. Based on the literature review, a second hypothesis is formulated:

H2. Sustainable HRM has positive impact on perceived employability

The hypothesised relationships between the study constructs are shown in Figure 1.

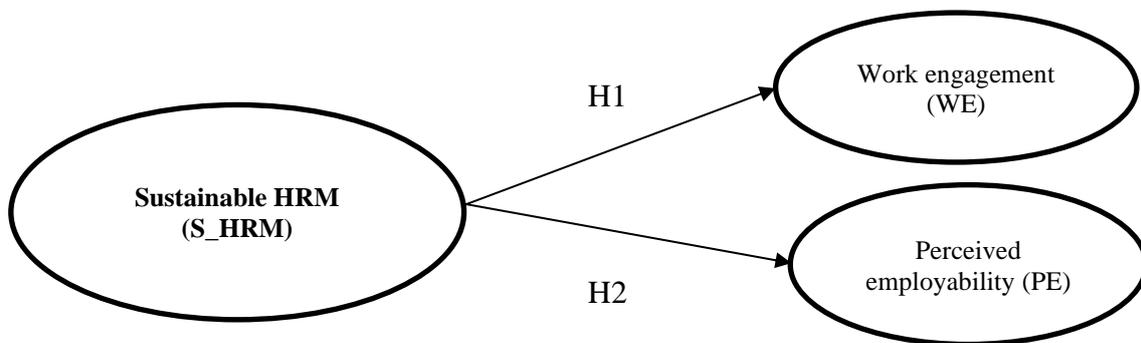


Figure 1. Impact of sustainable HRM on work engagement and perceived employability - research model.

Source: *own data*

2. Methodological approach

2.1. Procedure and Sample

To test the model of the relationship between sustainable HRM and work engagement and perceived employability, a quantitative study was conducted among employees. The sample was purposive-quantitative and involved surveying 1010 employees of organisations

with a minimum of 10 employees, including 202 in managerial positions and 808 in non-managerial positions. The survey was conducted on a survey panel accredited by PKJPA and ESOMAR using the CAWI (Computer Assist Web Interview) platform in May 2021, resulting in a representative sample of working Polish internet users.

There were as many women as men in the surveyed sample. More than half (54%) of the respondents had a university degree. The most numerous group was employed persons aged 35-54, followed by the youngest aged 18-34, and almost every fourth person was at least 55 years old (45.6%, 30.8%, 23.6% respectively). The sample was dominated by people with at least 10 years of work experience (69%). 54% worked in the SME sector and the remaining 46% in large entities (46%). Stationary work was performed by 61.8% of the respondents, while the rest used took advantage of the possibility of remote work in whole or in part.

2.2. Measures

The study used adaptations of two research tools to assess Sustainable HRM: humanistic sustainability HRM practices and green HRM. Thirteen of the fourteen items included in the humanistic sustainability HRM practices questionnaire (Asis-Castro & Edralin, 2018) were considered. These included items such as: HS_HRM_2 Ethics and integrity are promoted, HS_HRM_9 Employer-employee relations are nurtured to improve sustainability performance, or HS_HRM_12 Fair recruitment practices are implemented to ensure equal opportunities for all job seekers with the right skills. Excluded from the analysis was an item on the promotion of remote working, which due to the timing of the survey (lockdown due to the pandemic) was widely used and was due to temporary regulations, among other things. Respondents provided answers on a five-point Likert scale, where 1 is 'no' and 5 is 'yes, to a very large extent'. Three green HRM (Dumont et al., 2017) items covering goal-setting, training and remuneration activities were also used for measurement. Three statements were selected from the tool to cover key aspects of green HRM, e.g. G_HRM_2 Training is provided to employees to promote green values. Responses were also based on a five-point Likert scale, where 1 is 'strongly disagree' and 5 is 'strongly agree'. Overall, both scales served as a latent variable to measure Sustainable HRM.

In the conducted study, work engagement was measured by means of the UWES-3 survey tool (Schaufeli et al., 2019) including the following dimensions: (1) vigour - i.e. declarations of feeling energetic at work, (2) devotion to work - diagnosed by declarations of dedication to the work performed, and (3) work preoccupation - i.e. experiencing full concentration on tasks during work. Based on the work of M. Juchnowicz (2012), the translation of the question was modified. The item used examined the declaration of doing work with passion. A response system based on a six-point Likert scale was used, where 1 is 'never' and 6 is 'always'.

The study used the construct of perceived employability developed by H. De Witte (1992), and repeatedly used in studies by N. De Cuyper et al. (2014) and others. It consists of four statements, examples of which are PE_3 I will easily find a job if I lose my current one. Respondents rated these statements on a 5-point scale, where 1 is 'strongly disagree' and 5 is 'strongly agree'.

3. Conducting research and results

3.1. Psychometric properties of the scales

The psychometric properties of the scales of the study variables were assessed using confirmatory factor analysis (CFA) in the AMOS program. Two sustainable HRM dimensions were included in the measurement model: humanistic sustainability HRM practices (HS_HRM) and green HRM (G_HRM), work engagement (WE) and perceived employability (PE). F-L criteria were used to assess the psychometric properties of the scales (Fornell & Larcker, 1981). The fit of the measurement model is good. The chi-squared value was 946.030 (224 df), $p < 0.001$. Measures of absolute fit (GFI and AGFI) exceed 0.9 (=0.924 and =0.906 respectively). Measures of relative fit such as NFI, IFI, TLI, CFI exceed or are close to the value of 0.95 (0.948, 0.961; 0.956 and 0.961 respectively). The RMSEA which is equal to 0.056 and the upper limit of the confidence interval for the RMSEA do not exceed the value of 0.06. The SRMR is 0.0366 and is also within the limits for well fitted models (does not exceed 0.08).

Estimates and standardised estimates for path charges between statements (items) and the whole construct are significant and exceed the value of charges of 0.5 (with lower estimates of charge > 0.630). As a result, the psychometric properties of the scales achieve high measures of validity and reliability. All estimates are significant, the signs are consistent, and the standardised estimates exceed the 0.5 value (and most of them even the 0.7 value). All scales of the model are reliable, respectively CR=0.949 for the HS_HRM variable, CR=0.835 for G_HRM, CR=0.843 for EC and CR=0.921 for PE. The scale constructs described show convergent and differential validity confirming their theoretical relevance (see Table 1 for details).

Table 1. Assessment of psychometric properties of scales

Scale of the construct	CR	MSV	AVE	Correlations/elements with AVE *			
				HS_HRM	G_HRM	WE	PE
HS_HRM	0,949	0,561	0,591	0,769			
G_HRM	0,835	0,561	0,629	0,749	0,793		
WE	0,843	0,198	0,644	0,445	0,433	0,802	
PE	0,921	0,043	0,745	0,208	0,186	0,178	0,863

CR – Composite Reliability (ρ Jöreskoga), MSV – maximum shared variance AVE – average variance extracted, * On the diagonal, the root a AVE is shown in bold.

Source: *own compilation*

3.2. Hypothesis and model testing

The model of relationships between constructs was estimated using the SEM approach. The confirmatory model approach was used (Jöreskog & Sörbom, 1993). The fit of the measurement model is satisfactory. The chi-squared value was 850.344 (226 df), $p < 0.001$. Measures of absolute fit like GFI=0.924) and AGFI=907 are at a decent level (above 0.9). SRMR=0.0384 is low, below the value of 0.08 taken as reference. Measures of relative fit are above or close to 0.95. RMSEA =0.052 does not exceed the value of 0.06 considered as a threshold for well-fitting models, and the confidence interval for RMSEA (0.049; 0.056) does not contain a value of 0.1 disqualifying the model. The upper limit of the confidence interval for RMSA is below the threshold of 0.08 taken as the limit for acceptable model fit.

To test the associations of S_HRM with WE and PE, path coefficients were estimated (Figure 2). S_HRM has a strong positive effect on the work engagement variable (0.51; $p < 0.001$) and explains 26% of its variability ($R^2 = 0.26$), which is consistent with H1. In

contrast, the effect of S_HRM on the variable perceived employability is not so clear. Although the effect of S_HRM on this variable is moderate (0.24; $p < 0.001$), the variability of perceived employability is an effect of other variables ($R^2 = 0.06$). As a result, H2 was partially confirmed.

Additionally, paths between the two subscales HS_HRM and G_HRM on the overall variable S_HRM were estimated. The results obtained ($R^2 = 0.72$) confirm that a significant part of their variability is explained by a common factor, which is an argument for the consistency of S_HRM.

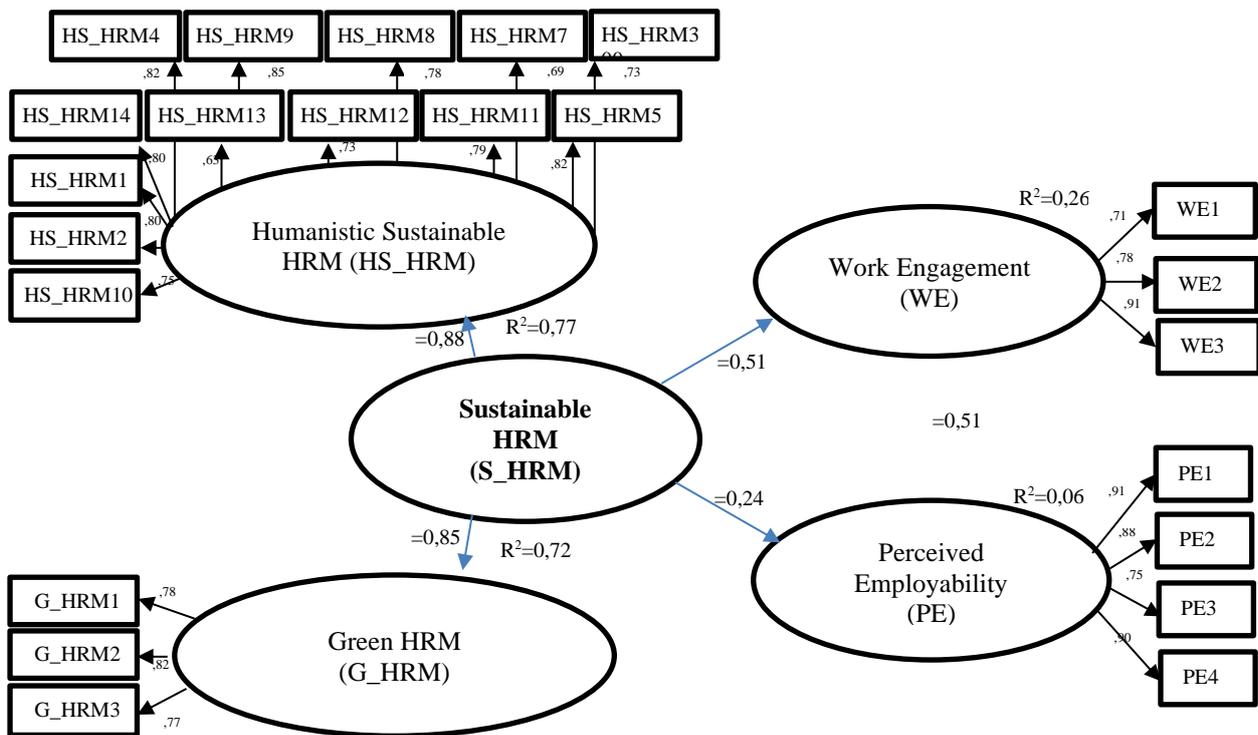


Figure 2. Research model
Source: own compilation

3.3. Discussion

Most academic publications on sustainable HRM are descriptive in nature, while empirical research in this area is lacking. Existing research tools are rarely validated in the context of sustainable HRM theory development.

There is no consensus in literature on the interpretation of the term sustainable HRM itself. Authors of publications emphasize different elements of this concept. Although sustainable HRM is not well established, new concepts are emerging such as green HRM, socially responsible HRM, triple bottom line HRM, and common good HRM.

This study aimed to identify the impact of sustainable HRM on employee engagement and perceived employability. The study provided significant findings that may be useful in developing future research and identifying the practical implications in the field of Sustainable HRM.

The studied variables proved to be theoretically accurate. The research conducted allowed the verification of the research hypotheses set on the basis of the literature analysis. Hypothesis 1 was confirmed: sustainable HRM shows a strong positive impact on work

engagement. On the other hand, the effect of sustainable HRM on perceived employability is moderate, which means that hypothesis 2 is partially confirmed.

Described in literature, few studies confirm the positive relationship between sustainable HRM and job engagement (Wang & Tseng, 2019; Xu et al., 2020). In this aspect, the results obtained are not surprising in terms of originality. In the case of working poles, sustainable HRM practices such as promoting ethics and diversity, flexibility at work, avoiding discrimination in remuneration and fostering pro-environmental attitudes, had a positive effect on work engagement, i.e. a state of mind positively related to work, resulting in performing tasks with energy, dedication and passion. In practice, this means recommending that employers design work environments that support sustainable development.

The authors found no direct research in literature on the relationship between sustainable HRM and perceived employability. The conducted research should be considered as pioneering. The research results partially confirmed hypothesis 2 verifying the impact of sustainable HRM on employability. In justifying the research results, it is important to refer to the determinants affecting perceived employability.

Perceived employability develops in a person due to individual and situational factors (McQuaid & Lindsay, 2005). Individual factors include employee competencies (knowledge, skills, attitudes), work experience, education (Wittekind, Raeder, Grote, 2010) or health status. Situational factors, on the other hand, are independent of the individual and are expressed primarily in the multiplicity of labour supply and demand, state policy, and the structure of the labour market (Nimmi & Zakkariya, 2021). Employability should therefore be treated as an effect of the interaction of multiple factors of a dynamic nature. In view of the above, partial confirmation of hypothesis 2 seems justified.

This study has some limitations that should be noted in the planned work on this issue. The most important limitations include: (1) the limitation of the research sample to Polish employees, (2) the study of relationships in a static perspective (the constructs studied may be time-dependent and may be variable in nature), (3) the protean orientation of the research (self-orientation). The results of the study may have been influenced by the changing conditions associated with the COVID 19 pandemic.

Considering the topicality and importance of the issues raised in this article, further research is necessary, taking into account a longer time frame and including a more diverse research sample (employees from different countries and regions). Further research should delve deeper into the impact of specific sustainable HRM practices on work engagement and perceived employability. It would be worth extending the research to include other types of commitment, e.g. organisational attachment and the inclusion of determinants in the analysis of perceived employability.

Conclusion

As far as the authors are aware, the research findings presented in this paper are one study simultaneously encompassing sustainable human resource management, work engagement and perceived employability. The results of the conducted research extend the knowledge regarding the impact of Sustainable HRM on work engagement and perceived employability. They confirm the validity of verifying the relationship between the studied variables. The research conducted among employees enabled testing of the model of the relationship between sustainable HRM and work engagement and perceived employability. The results of the study confirm a strong influence of sustainable HRM and a moderate influence of sustainable HRM on perceived employability.

The findings of the study can be of significant value to organisational practitioners and policy makers when developing sustainable HRM policies and practices. For practitioners interested in increasing employee engagement, this will entail focusing on providing flexible working conditions that promote ethics and diversity, avoiding discrimination in remuneration, and using practices to promote mindfulness in goal setting, training and employee appraisal. In turn, employability will be influenced primarily by supply and demand factors in the labour market, as well as individual factors such as workers' competences, experience and education.

Acknowledgement

This research was carried out as part of Statutory Research for 2019-2021 of the Collegium of Business Administration, SGH Warsaw School of Economics "Enterprise in the face of sustainable development requirements".

References

- Alpler, N. N., & Arasli, H. (2020). Can hindrance stressors change the nature of perceived employability? An empirical study in the hotel industry. *Sustainability (Switzerland)*, *12*(24), 1–13. <https://doi.org/10.3390/su122410574>
- Arnaud, S., & Wasieleski, D. M. (2014). Corporate Humanistic Responsibility: Social Performance Through Managerial Discretion of the HRM. *Journal of Business Ethics*, *120*(3), 313–334. <https://doi.org/10.1007/s10551-013-1652-z>
- Asis-Castro, A. L., & Edralin, D. M. (2018). Predictors of humanistic sustainability hrm practices. *DLSU Business and Economics Review*, *27*(2), 130–146.
- Aust, I., Matthews, B., & Muller-Camen, M. (2020). Common Good HRM: A paradigm shift in Sustainable HRM? *Human Resource Management Review*, *30*(3), 100705. <https://doi.org/10.1016/j.hrmr.2019.100705>
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: engaged employees in flourishing organizations. *Journal of Organizational Behavior*, *29*(2), 147–154.
- Baranchenko, Y., Xie, Y., Lin, Z., Lau, M. C. K., & Ma, J. (2020). Relationship between employability and turnover intention: The moderating effects of organizational support and career orientation. *Journal of Management and Organization*, *26*(2), 241–262. <https://doi.org/10.1017/jmo.2019.77>
- Becker, C. (2011). *Sustainability ethics and sustainability research*. Springer Science & Business Media.
- Bombiak, E., & Marciniuk-Kluska, A. (2018). Green human resource management as a tool for the sustainable development of enterprises: Polish young company experience. *Sustainability (Switzerland)*, *10*(6). <https://doi.org/10.3390/su10061739>
- Bučioniene, I., & Kazlauskaitė, R. (2012). The linkage between HRM, CSR and performance outcomes. *Baltic Journal of Management*, *7*(1), 5–24. <https://doi.org/10.1108/17465261211195856>
- Bush, J. T. (2020). Win-Win-Lose? Sustainable HRM and the promotion of unsustainable employee outcomes. *Human Resource Management Review*, *30*(3), 100676. <https://doi.org/10.1016/j.hrmr.2018.11.004>
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: a quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, *64*, 89–136.
- Cohen, E., Taylor, S., & Muller-Camen, M. (2012a). HRM's role in corporate social and environmental sustainability. *SHRM Report*, *1*, 1–16.

- Cohen, E., Taylor, S., & Muller-Camen, M. (2012b). *SHRM Foundation's Effective Practice Guidelines Series HRM's Role in Corporate Social and Environmental Sustainability*. 1–55. www.shrmfoundation.org
- de Grip, A., Fouarge, D., Montizaan, R., & Schreurs, B. (2020). Train to retain: Training opportunities, positive reciprocity, and expected retirement age. *Journal of Vocational Behavior*, *117*, 103332.
- De Prins, P., Van Beirendonck, L., De Vos, A., & Segers, J. (2014). Sustainable HRM: Bridging theory and practice through the 'Respect Openness Continuity (ROC)'-model. *Management Revue*, *25*(4), 263–284. <http://www.jstor.org/stable/24710112>
- de Souza Freitas, W. R., Jabbour, C. J. C., & Santos, F. C. A. (2011). Continuing the evolution: towards sustainable HRM and sustainable organizations. *Business Strategy Series*, *12*(5), 226–234. <https://doi.org/10.1108/17515631111166861>
- De Vos, A., & Van der Heijden, B. I. (2017). Current thinking on contemporary careers: the key roles of sustainable HRM and sustainability of careers. *Current Opinion in Environmental Sustainability*, *28*(August), 41–50. <https://doi.org/10.1016/j.cosust.2017.07.003>
- De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, *117*, 103196.
- De Witte, H. (1992). Langdurig werklozen: Tussen optimisten en teruggetrokkenenen [The longterm unemployed: Between optimism and resignation]. *Leuven: Hoger Instituut van de Arbeid*.
- Donald, W. E., Ashleigh, M. J., & Baruch, Y. (2018). Students' perceptions of education and employability: Facilitating career transition from higher education into the labor market. *Career Development International*, *23*(5), 513–540. <https://doi.org/10.1108/CDI-09-2017-0171>
- Donald, W. E., Baruch, Y., & Ashleigh, M. J. (2020). Striving for sustainable graduate careers: Conceptualization via career ecosystems and the new psychological contract. *Career Development International*, *25*(2), 90–110. <https://doi.org/10.1108/CDI-03-2019-0079>
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values. *Human Resource Management*, *54*(4), 613–627. <https://doi.org/https://doi.org/10.1002/hrm.21792>
- Ehnert, I. (2009). Sustainability and human resource management: reasoning and applications on corporate websites. *European Journal of International Management*, *3*(4), 419–438.
- Ehnert, I., & Harry, W. (2012). Recent Developments and Future Prospects on Sustainable Human Resource Management: Introduction to the Special Issue. *Mrev Management Revue*, *3*(23), 21–238. <https://doi.org/10.5771/0935-9915-2012-3-221>
- Ehnert, I., Harry, W., & Zink, K. J. (2014). *Sustainability and HRM BT - Sustainability and Human Resource Management: Developing Sustainable Business Organizations* (I. Ehnert, W. Harry, & K. J. Zink (eds.); pp. 3–32). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-37524-8_1
- Ehnert, I., Parsa, S., Roper, I., Wagner, M., & Muller-Camen, M. (2016). Reporting on sustainability and HRM: a comparative study of sustainability reporting practices by the world's largest companies. *International Journal of Human Resource Management*, *27*(1), 88–108. <https://doi.org/10.1080/09585192.2015.1024157>
- Elkington, J. (1994). Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development. *California Management Review*, *36*(2), 90–100. <https://doi.org/10.2307/41165746>

- Eurofound. (2021). *Towards recovery and resilience*. Publications Office of the European Union. <https://doi.org/10.2806/216218>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Forrier, A., & Sels, L. (2003). The concept employability: a complex mosaic. *International Journal of Human Resources Development and Management*, 3(2), 102–124. <https://doi.org/10.1504/IJHRDM.2003.002414>
- Frémeaux, S., & Michelson, G. (2017). The Common Good of the Firm and Humanistic Management: Conscious Capitalism and Economy of Communion. *Journal of Business Ethics*, 145(4), 701–709. <https://doi.org/10.1007/s10551-016-3118-6>
- Fugate, M. (2006). Employability. *Encyclopedia of Career Development*, 1, 267–271.
- Giancaspro, M. L., Manuti, A., Lo Presti, A., & De Rosa, A. (2021). Human resource management practices perception and career success: The mediating roles of employability and extra-role behaviors. *Sustainability (Switzerland)*, 13(21). <https://doi.org/10.3390/su132111834>
- Greenwood, M. (2013). Ethical Analyses of HRM: A Review and Research Agenda. *Journal of Business Ethics*, 114(2), 355–366. <http://www.jstor.org/stable/23433897>
- Guo, J., Qiu, Y., & Gan, Y. (2022). Workplace incivility and work engagement: The mediating role of job insecurity and the moderating role of self-perceived employability. *Managerial and Decision Economics*, 43(1), 192–205. <https://doi.org/https://doi.org/10.1002/mde.3377>
- Harvey, G., Williams, K., & Probert, J. (2013). Greening the airline pilot: HRM and the green performance of airlines in the UK. *International Journal of Human Resource Management*, 24(1), 152–166. <https://doi.org/10.1080/09585192.2012.669783>
- Heijde, C. M. Van Der, & Heijden, B. I. J. M. Van Der. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management*, 45(3), 449–476. <https://doi.org/https://doi.org/10.1002/hrm.20119>
- Hoffman, R. C., & Shipper, F. M. (2018). Shared core values of high performing employee-owned enterprises. *Journal of Management, Spirituality & Religion*, 15(4), 285–304. <https://doi.org/10.1080/14766086.2018.1482474>
- Hollensbe, E., Wookey, C., Hickey, L., George, G., & Nichols, C. V. (2014). Organizations with Purpose. *Academy of Management Journal*, 57(5), 1227–1234. <https://doi.org/10.5465/amj.2014.4005>
- Jabbour, C. J. C. (2011). How green are HRM practices, organizational culture, learning and teamwork? A Brazilian study. *Industrial and Commercial Training*, 43(2), 98–105. <https://doi.org/10.1108/00197851111108926>
- Järnlström, M., Saru, E., & Vanhala, S. (2018). Sustainable Human Resource Management with Salience of Stakeholders: A Top Management Perspective. *Journal of Business Ethics*, 152(3), 703–724. <https://doi.org/10.1007/s10551-016-3310-8>
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Scientific Software International.
- Juchnowicz, M. (2012). *Zaangażowanie pracowników. Sposoby oceny i motywowania (Employee engagement. Ways of evaluation and motivation)*. PWE.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.

- Karman, A. (2020). Understanding sustainable human resource management–organizational value linkages: The strength of the SHRM system. *Human Systems Management*, 39(1), 51–68.
- Kashyap, V., & Arora, R. (2020). Decent work and work–family enrichment: role of meaning at work and work engagement. *International Journal of Productivity and Performance Management*.
- Kinowska, H. (2009). Wpływ czynników strukturalnych na zaangażowanie pracowników. *Edukacja Ekonomistów i Menedżerów*, 12(2), 65–81.
- Kramar, R. (2014). Beyond strategic human resource management: is sustainable human resource management the next approach? *The International Journal of Human Resource Management*, 25(8), 1069–1089. <https://doi.org/10.1080/09585192.2013.816863>
- Kramar, R. (2022). Sustainable human resource management: six defining characteristics. *Asia Pacific Journal of Human Resources*, 60(1), 146–170. <https://doi.org/10.1111/1744-7941.12321>
- Lewicka, D. (2019). *Zarządzanie kapitałem ludzkim a zaangażowanie pracowników*. Wydawnictwo C.H Beck.
- Li, S. L., Sun, F., & Li, M. (2019). Sustainable human resource management nurtures change-oriented employees: Relationship between high-commitment work systems and employees’ taking charge behaviors. *Sustainability (Switzerland)*, 11(13). <https://doi.org/10.3390/su11133550>
- Macke, J., & Genari, D. (2019). Systematic literature review on sustainable human resource management. *Journal of Cleaner Production*, 208, 806–815.
- Mariappanadar, S. (2003). Sustainable human resource strategy. *International Journal of Social Economics*, 30(8), 906–923. <https://doi.org/10.1108/03068290310483779>
- McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies*, 42(2), 197–219. <https://doi.org/10.1080/0042098042000316100>
- Meyer, J. P. (2016). *Handbook of employee commitment*. Edward Elgar Publishing.
- Ngo, H. Y., Liu, H., & Cheung, F. (2017). Perceived employability of Hong Kong employees: its antecedents, moderator and outcomes. *Personnel Review*, 46(1), 17–35. <https://doi.org/10.1108/PR-01-2015-0015>
- Nimmi, N. P., & Zakkariya, K. A. (2021). Determinants of perceived employability in current career context: evidence from India. *Journal of Asia Business Studies*, 15(5), 804–820. <https://doi.org/10.1108/JABS-05-2020-0187>
- O’Donohue, W., & Torugsa, N. A. (2016). The moderating effect of ‘Green’ HRM on the association between proactive environmental management and financial performance in small firms. *International Journal of Human Resource Management*, 27(2), 239–261. <https://doi.org/10.1080/09585192.2015.1063078>
- Pabian, A. (2017). Zrównoważone zarządzanie zasobami ludzkimi – zarys problematyki (Sustainable human resources management - an overview). *Zeszyty Naukowe Politechniki Częstochowskiej (Scientific Journal of the Częstochowa University of Technology)*, 17, 7–16. <http://bazekon.icm.edu.pl/bazekon/element/bwmeta1.element.ekon-element-000171396555>
- Parakandi, M., & Behery, M. (2016). Sustainable human resources: Examining the status of organizational work–life balance practices in the United Arab Emirates. *Renewable and Sustainable Energy Reviews*, 55, 1370–1379. <https://doi.org/10.1016/j.rser.2015.07.095>
- Peters, P., Van der Heijden, B. I. J. M., Spurk, D., De Vos, A., & Klaassen, R. (2019). Please don’t look at me that way. An empirical study into the effects of age-based (meta-)stereotyping on employability enhancement among older supermarket workers. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00249>

- Podgorodnichenko, N., Edgar, F., & McAndrew, I. (2020). The role of HRM in developing sustainable organizations: Contemporary challenges and contradictions. *Human Resource Management Review*, 30(3), 100685. <https://doi.org/10.1016/j.hrmr.2019.04.001>
- Radvila, G., & Silingiene, V. (2018). Characteristics of Remuneration Systems of Organizations for Sustainable Human Resource Management: Theoretical Approach. In *7Th International Conference on Changes in Social and Business Environment (Cisabe' 2018)*.
- Rothwell, A., & Arnold, J. (2007). Self-perceived employability: development and validation of a scale. *Personnel Review*, 36(1), 23–41. <https://doi.org/10.1108/00483480710716704>
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(2), 600–619.
- Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies Volume*, 3, 71–92.
- Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and work engagement: three of a kind or three different kinds of employee well-being? *Applied Psychology*, 57(2), 173–203.
- Shen, J., & Jiuhua Zhu, C. (2011). Effects of socially responsible human resource management on employee organizational commitment. *The International Journal of Human Resource Management*, 22(15), 3020–3035. <https://doi.org/10.1080/09585192.2011.599951>
- Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: a seminal review of the foundations. *Human Resource Development Review*, 9(1), 89–110.
- Simpson, M. R. (2009). Engagement at work: a review of literature. *International Journal of Nursing Studies*, 46, 1012–1024.
- Smaliukiene, R., & Bekesiene, S. (2020). Towards sustainable human resources: How generational differences impact subjective wellbeing in the military? *Sustainability (Switzerland)*, 12(23), 1–21. <https://doi.org/10.3390/su122310016>
- Stankevičiute, Ž., & Savanevičiene, A. (2018). Raising the curtain in people management by exploring how sustainable HRM translates to practice: The case of Lithuanian organizations. *Sustainability (Switzerland)*, 10(12). <https://doi.org/10.3390/su10124356>
- Stankevičiūtė, Ž., & Savanevičienė, A. (2018). Designing Sustainable HRM: The Core Characteristics of Emerging Field. In *Sustainability* (Vol. 10, Issue 12). <https://doi.org/10.3390/su10124798>
- Van der Heijden, B. I. J. M., Van Vuuren, T. C. V., Kooij, D. T. A. M., & de Lange, A. H. (2015). Tailoring professional development for teachers in primary education: The role of age and proactive personality. *Journal of Managerial Psychology*, 30(1), 22–37. <https://doi.org/10.1108/JMP-07-2014-0211>
- Van der Klink, J. J., Bültmann, U., Burdorf, A., Schaufeli, W. B., Zijlstra, F. R., Abma, F. I., Brouwer, S., & Van der Wilt, G. J. (2016). Sustainable employability—definition, conceptualization, and implications: a perspective based on the capability approach. *Scandinavian Journal of Work, Environment & Health*, 71–79.
- Vanhercke, D., De Cuyper, N., Peeters, E., & De Witte, H. (2014). Defining perceived employability: A psychological approach. *Personnel Review*, 43(4), 592–605. <https://doi.org/10.1108/PR-07-2012-0110>
- Veld, M., Semeijn, J., & van Vuuren, T. (2015). Enhancing perceived employability: An interactionist perspective on responsibilities of organizations and employees. *Personnel Review*.

- Visser, W., & Brundtland, G. H. (1987). Our Common Future ('The Brundtland Report'): World Commission on Environment and Development. *The Top 50 Sustainability Books*, 52–55. https://doi.org/10.9774/gleaf.978-1-907643-44-6_12
- Wang, C. J., & Tseng, K. J. (2019). Effects of selected positive resources on hospitality service quality: The mediating role of work engagement. *Sustainability (Switzerland)*, 11(8). <https://doi.org/10.3390/su11082320>
- Williams, A.-M. C. (2015). Soft skills perceived by students and employers as relevant employability skills. *ProQuest Dissertations and Theses*, 373. https://search.proquest.com/docview/1719263606?accountid=35516%0Ahttp://uwi-primoalma-prod.hosted.exlibrisgroup.com/openurl/MIL/mil_services_page?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:Pro
- Xu, F. Z., Zhang, Y., Yang, H., & Wu, B. T. (2020). Sustainable HRM through improving the measurement of employee work engagement: Third-person rating method. *Sustainability (Switzerland)*, 12(17), 1–22. <https://doi.org/10.3390/su12177100>
- Ybema, J. F., van Vuuren, T., & van Dam, K. (2020). HR practices for enhancing sustainable employability: implementation, use, and outcomes. *International Journal of Human Resource Management*, 31(7), 886–907. <https://doi.org/10.1080/09585192.2017.1387865>
- Zaugg, R. J., Blum, A., & Thom, N. (2001). Sustainability in human resource management. *Evaluation Report. Survey in European Companies and Institutions. Arbeitsbericht Des Instituts Für Organisation Und Personal Der Universität Bern Und Des Eidgenössischen Personalamtes*.
- Zoogah, D. B. (2011). The Dynamics of Green HRM Behaviors: A Cognitive Social Information Processing Approach. *German Journal of Human Resource Management*, 25(2), 117–139. <https://doi.org/10.1177/239700221102500204>