



Publisher

<http://jssidoi.org/esc/home>



INTANGIBLE RESOURCES FOR AN ORGANIZATION'S SUSTAINABILITY POTENTIAL

Helena Bulińska-Stangrecka¹ , Anna Bagińska² 

¹ Faculty of Administration and Social Sciences, Warsaw University of Technology, Plac Politechniki Street 1, 00-661 Warszawa, Poland

² Faculty of Engineering Management, Białystok University of Technology, Wiejska Street 45, 15-351 Białystok, Poland

E-mails:¹ h.bulinska-stangrecka@ans.pw.edu.pl ; ² a.baginska@pb.edu.pl

Received 10 January 2020; accepted 15 June 2020; published 30 September 2020

Abstract. The purpose of this paper is to develop and investigate the relationship between intangible resources such as employee relationships and workplace collaboration in building sustainability potential. A research model and hypotheses were constructed on the grounds of Resource-based-view Theory (RBV) and Cooperation theory (CT). The data was obtained from 175 employees' from the telecommunications sector in Poland. The results were used to carry out a two-step structural equation modelling analysis, including confirmatory analysis and verification of the hypothesized relationship. The findings indicate that there is a linkage between intangible resources such as employee relationships and sustainability potential. Additionally, the results imply that workplace collaboration impacts the development of sustainability potential. Furthermore, collaboration strengthens the explicit knowledge flow within organizations. This research demonstrated the importance of employee relationships as a key component of organizational sustainability. Collaboration is positively related to explicit knowledge transfer. Managers should promote positive employee relationships in order to enhance the organization's sustainability potential.

Keywords: Intangible resources; resource-based-view theory; employee relationships; cooperation theory; sustainability potential

Reference to this paper should be made as follows: Bulińska-Stangrecka, H., Bagińska, A. 2020. Intangible resources for an organization's sustainability potential. *Entrepreneurship and Sustainability Issues*, 8(1), 741-761. [http://doi.org/10.9770/jesi.2020.8.1\(50\)](http://doi.org/10.9770/jesi.2020.8.1(50))

JEL Classifications: M54, M14, M21

1. Introduction

Sustainability is a key characteristic that helps organizations to gain a competitive advantage in a volatile, uncertain, complex and ambiguous (VUCA) environment. A potential for sustainability provides an organization with a flexibility and resilience to react and adjust to a changeable economy. To address the ongoing pressure, organizations need to attain sustainability (Wijethilake, Ekanayake 2018). The proper identification of the sources facilitating sustainability potential are essential for companies' successful adaptation to a changeable environment. According to the resource-based-view theory (RBV), the strength of an organization lies in its internal resources (Wright et al. 2001). The RBV highlights the impact the internal organization's resources have

on companies' output (Chen et al. 2017). Thus, this paper emphasizes the role of core resources in enhancing the organization's sustainability potential. RBV theory indicates that there is a linkage between the organization's internal resources and the development of sustainable competitive advantage (Barney et al. 2011). Moreover, RBV theory focuses on non-observable factors in the development of organizational potential (Won, Chelladurai 2016). Furthermore, it has been acknowledged that especially intangible resources such as employee relationships (ER) contribute to the organization's performance (Campbell, Park 2017).

ER can be defined as a positive relationship between individuals in an organization (Asghar et al. 2016), based on values, participation in decision making and the sense of community in the organization, as well as team cohesiveness (Blyton, Turnbull 1998). ER focus on a mutual respect and power balance within organizations (Li 2018). Positive ER result from an egalitarian structure, high involvement and decision making (De Massis et al. 2018). Hence, the sense of community and participation in decision making processes are good indicators of ER. Numerous studies confirm that intangible resources are playing important role in developing an organization's sustainability potential (Pearson et al. 2015; Khan et al. 2019, Won, Chelladurai 2016). Especially human resources, such as ER, support an organization's ability to adjust and sustain in the long term (Wright et al. 2001; de Souza Freitas et al. 2011; Černevičiūtė, Strazdas 2018). Thus, to leverage the sustainability potential, managers must improve ER and focus on strategies strengthening the human factor in organizations (Kim, Bae 2004). For instance, Nawaz and Koç (2019) claim that organizational sustainability is linked to ER. Therefore sustainable human resource management (HRM) facilitates the development of intangible resources such as ER and collaboration (Clipa et al. 2019; Bulińska-Stangrecka, Bagińska 2019). Moreover, human resources are indicated as an essential component in building organizational sustainability (Stankevičiūtė, Savanevičienė 2018). However, the relationship between ER and sustainability potential has not been empirically explored in literature. There are theoretical papers introducing the convergence of ER and sustainability potential (Stankevičiūtė, Savanevičienė 2018) yet this lacks empirical validation. Additionally, some studies analyse sustainable ER and its impact on employees' satisfaction in the long-term. However, to the best of our knowledge, there is no research verifying how improving ER and collaboration will influence an organization's sustainability potential. This paper addresses this research gap, by providing empirical evidence of the relationship between ER, workplace collaboration and an organization's sustainability potential.

Consequently, this research seeks to contribute to the existing literature by investigating the relationship between sustainability potential and ER and workplace collaboration. Additionally it discusses the consequences of this linkage on explicit knowledge sharing practices, which strengthens the capability to transfer and refine knowledge in organizations (Pop et al. 2015). It builds on previous studies which emphasize the importance of sustainable competitive advantage and intangible resources. On the basis of RBV, this study indicates the significance of human resources (such as ER and collaboration) in developing sustainability. Next, it uses Cooperation Theory (CT) as a reference point to explain the connection between ER, workplace collaboration and an organization's sustainability potential and explicit knowledge transfer. This paper aims to develop a new research model and to analyse the relationship between the discussed variables. Further, the purpose of this paper is to answer the following research question:

Do the ER and workplace collaboration have an impact on an organization's sustainability potential?

This study discloses the issue of the role of intangible resources such as core components facilitating organizational sustainability.

The remainder of this paper is organized as follows: first the literature review is presented, followed by the hypothesis development. Then the research methodology is presented. Further, the research results are exhibited and discussed. Finally the contributions and limitations are described.

2. Literature review and Hypothesis development

2.1. Employees' relationships as a factor affecting collaboration in organizations

Under RBV theory, intangible resources strengthen organization performance (Monteiro et al. 2017; Franca, Dua 2018; Kamasak 2017). Intangible resources are defined as rare and valuable assets that lead to competitive advantage, which, if able to withstand in the long term, became a sustainable competitive advantage (Kristandl, Bontis 2007). They are usually described as a core component contributing to an organization's success, yet are not recognized by traditional financial statements (Castilla-Polo, Gallardo-Vázquez 2016). The critical importance of intangible resources refers to its scarcity and difficulty to imitate by competitors. Furthermore, they are not available to large numbers of firms (Kristandl, Bontis 2007). For instance, Okpara, (2015) confirms on the basis of empirical analysis that indeed intangible resources such as culture, knowledge and management support a firm's sustainable competitive advantage and performance. Further, Ying, Hassan and Ahmad (2019) proved that intangible assets boost the organizational ability to acquire external, valuable resources. Indeed, Fazlagić and Skikiewicz (2019) point out that the main danger to the sustainability of an organization is a scarcity of intangible resources. Hence, the RBV theory considers intangible assets as an essential component of a firm's sustainable competitive advantage.

RBV theory assumes that competitive advantage is inconstant, therefore the main goal of organizations is oriented toward acquisition and the creation of unique strategic resources, which are hard to imitate (Barney et al. 2011). In particular, various resources will lead to competitive advantages and, consequently, improved organization performance. An effective and creative usage, development and merging of organizational resources, in alignment with an enterprise's objectives, helps firms to achieve a competitive advantage (Volberda, Karali 2015; Burvil et al. 2018). Intangible resources (such as relationships, collaboration and knowledge) differ from tangible resources because they cannot be purchased. It is necessary for a manager to implement practices to develop intangible resources, so their strategic potential will increase. Hence, the competitive value of an organization is inevitably associated with the management of its intangible resources (Nason, Wiklund 2018).

The human, relational and informational resources are listed as a core example of intangible resources (Monteiro et al. 2017; Liu et al. 2019). Especially, human and relational resources play a pivotal role in developing the organization's sustainable competitive advantage (Wright et al. 2001).

Generally, ER are considered to be the main responsibility of HRM functions within organizations (Blyton, Turnbull 1998). ER are recognized as a factor in shaping employee satisfaction and intention to stay (Abugre 2017). The notion of ER refers to the positive relationship between two or more individuals involved in a mutual relationship within the social and authority dimensions within an organizational context (Asghar et al. 2016). Moreover, ER in the wider sense concerns the way in which employers relate to employees (Armstrong 2006). ER concerns the quality of interaction between employees and between employees and managers (Blyton, Turnbull, 1998). ER manifests itself in employee participation in decision making processes, a high quality of interactions and a sense of community within organizations (De Massis et al. 2018). These three factors can indicate high quality ER.

Research confirms that ER impacts organizational performance (Worlu et al. 2016; Samwell 2018) and innovation (Brander, Zhang 2016). Additionally good ER strengthens employees' learning capability (Kooij et al. 2011). ER aims to build a harmonious relationship in the workplace (Anggraeni 2018). Further, it helps to develop work engagement (Conway et al. 2015; Kwon et al. 2016; Sahoo, Sahoo 2018). High quality ER are associated with higher employee productivity (Tansel, Gazioğlu 2014). The role of ER in enhancing work task completion has been acknowledged (Chen et al. 2016). Well developed ER provides a nurturing environment for creating

organizational effectiveness. Next, the empirical findings from Denmark support the link between ER and external collaboration between firms and universities (Østergaard, Drejer 2017). However, there is no empirical evidence regarding the internal dependency between ER and collaboration in organizations. Referring to the RBV theory, this study anticipates that the improvement of ER as an element of core intangible resources will lead to the enhancement of the effectiveness of the workplace collaboration. Therefore, this study assumes that there is a linkage between ER and collaboration. Hence the hypothesis:

H1. Employee relationships are positively related to workplace collaboration.

2.2. Workplace collaboration and organizations' sustainability potential

The main challenge for current managers refers to the straightening of an organization's capability to adjust to constant changes and adapt to new market condition and requirements. Scholars highlight that organizations which are able to work out and implement corporate strategies embedded in sustainable development became strategic leaders in the contemporary economy (Benn et al. 2014, Baumgartner, Rauter 2017). Furthermore, sustainability potential may increase an organization's competitive advantage (da Silva Batista, de Francisco 2018; Cantele, Zardini 2018; Lin et al. 2018).

Sustainable organizations are characterized by balanced development, fair and transparent rules and norms guiding both managers and employee behaviour oriented towards long-term sustainable resource management (Medne, Lapina 2019). Additionally, Benn, Edwards and Williams (2014) define a sustainable organization as a corporation which incorporates sustainable principles into its strategy and operation, while implementing sustainable values in society.

In an organizational context, competitive advantage evolves through the continued management of key resources (Kristandl, Bontis 2007), and an agile adjustment to changeable and volatile market requirements (Nijssen, Paauwe 2012; Cummins 2017). Sustainability and agility are considered as complementary concepts that support current managers in pursuing business goals (Obramović et. al. 2019). Strategic resources are usually embedded in unique practices which have evolved in time (Barney, 1991; Chen et al. 2010).

Business strategy and its implementation may lead to opposite outcomes. Therefore, sustainability potential helps managers to maintain valuable results. The sustainability potential in an organization comes from both the resources used (Moloy et al. 2011), and dynamic business models embedded in sustainable development (Consenz et al. 2019). The latest research confirms that versatile resources enhance flexibility in adjusting to a volatile business environment (Tehseen et. al. 2019; Nason, Wiklund 2018; Klier et. al. 2017). Effective management of an organization's sustainable development is based on a comprehension of organizational resources and their contribution (Ferreira, Fernandes 2017).

Human resource management is extensively recognized as central to sustainable development (Macke, Genari 2019; Bombiak, Marciniuk-Kluska 2018; Pellegrini et al. 2018). Sustainable human resource development is oriented toward the on-going support of human capital in organizations (van Dam et al. 2017). Hence, human resources contribute to the intangible development of the organization and the creation of a long-term competitive advantage.

Organizations' sustainability potential can be defined as the organizational capability for an agile adjustment to the changeable economic environment through the sustainable use of both tangible and intangible resources in order to develop constant competitive advantage.

Workplace collaboration plays a pivotal role in sustainable human resource management (Stankevičiūtė, Savanevičienė 2018). The critical importance of collaboration in developing sustainability potential has been

established (Caniglia et al. 2018). Collaboration facilitates productivity, especially in relation to complex work tasks which require coordination (Tjosvold, Yu 2004; Jasińska 2019). Positive relationships and workplace collaboration are regarded as intangible and long-lasting assets which increase the likelihood of achieving a competitive advantage in a given organization (Ahmad 2015).

In an organizational context, CT was first established by Deutsch (1949), and later developed simultaneously by Tjosvold (1984,1998) and by Johnson & Johnson (1989, 1999). The implications of CT reinforce managerial understanding of the essence of the relationships in a work group, problem solving methods (West et al. 2003), and the ways of mutual support between organization members oriented towards the improved effectiveness of workplace collaboration (Tjosvold, Johnson 2000). CT highlights the relationship between goals and behaviours in the workplace. The theory indicates that positively related goals strengthens employees' involvement and encourages mutual support and in consequence leads to better results and improved effectiveness (Tjosvold, Yu 2004). CT provides a framework to understand how goals affect interactions and results (Tjosvold, Johnson 2000; Chen et al. 2010). Collaboration is an enabler of task performance and can help employees' mutual and reciprocal support, interactive-based engagement, correction of errors and the synergy of ideas (Tjosvold, Yu 2004). Positive collaborative experiences may influence work engagement (Gerards et al. 2018). Collaboration increases the sense of community and integrates collective goals with individual objectives (Chen et al. 2010).

Even though organizations provide the necessary conditions for cooperation, individual and organizational goal alignment doesn't occur automatically (Zanda 2018). The managers play an essential role in developing interdependent goals both in a traditional and a virtual work environment (Afferbach 2020), shaping the positive image of an organization (Chen et al. 2010), whilst maintaining a positive relationship with stakeholders (Bosse, Coughlan 2016; Bundy et al. 2018) and developing the organization's sustainability potential.

Current human resource management is oriented toward initiating a collaboration and building team spirit in the workplace. Lorincová et al. (2019) and Macke & Genari (2019) suggest that human resource management is linked to environmental sustainability and organizational performance. Workplace collaboration is a process, which drives employees to achieve collective, organizational goals (Heavey, Murphy 2012; Bond-Barnard et al. 2018). Development of a high performing team depends on a high level of collaboration between team members (Shagholi et.al. 2010).

Hence, CT supports the notion that effective collaboration increases the employees' ability of collective effort and achieving common, organizational goals and developing intangible potential. The theory reasons that collective interactions result in sustainable development.

H2: Workplace collaboration positively influences an organization's sustainability potential

2.3. Workplace collaboration and explicit knowledge transfer

Knowledge is considered to be a core resource in the success of an organization (Grant 1996), which influences its performance (Bierl et al. 2009; Cegarra-Navarro et al. 2016). Knowledge is essential to making decisions, furthermore it supports effective processes and improvement (Cegarra-Navarro et al. 2016). Moreover, it has been shown to be a critical basis for creativity and innovation (Ferreira, Fernandes 2019; Munoz-Pascual, Galende 2017). Additionally, knowledge has been recognized as essential to gaining competitive advantage (Lee et al. 2016).

Both obtaining and retaining knowledge, plays a critical role in gaining a sustainable competitive advantage (Bolisani, Bratianu, 2017; Mahdi et al. 2019). The capability to effectively use knowledge helps to maintain long-term innovative potential in organizations (Ponce et al. 2018). The critical importance of knowledge management

in an organization's adjustment to the environment and further development has also been established (García-Cabrera et al. 2017). An effective use of knowledge helps to improve and implement new technology (Zheng et al. 2019). Such long-term sustainably developing organizations are able to cope with ongoing challenges and transformations (Mahdi et al. 2011). Organizational knowledge helps to establish grounds for sustainable competitive advantage (Teece 1998). Overall, knowledge management contributes to the organization's development both as a primary source of competitive advantage and as long-lasting intangible resource (Mahdi et al. 2011; Nonaka, Takeuchi 1995).

In an organizational context, there are two different types of knowledge (Nonaka, Takeuchi 1995; Polanyi 1962). Explicit knowledge can be relatively easily codified, transmitted and disseminated in the form of writing instructions or documentation (Smith 2001; Bencsik 2016). Tacit knowledge is embedded in employees' experiences and know-how, and is often non-verbalised and difficult to codify (Jasimuddin et al. 2005). Both types of knowledge are rooted in employees and involve their contribution to the organization's development (Donnelly 2019).

Explicit knowledge is practical knowledge, which can be articulated, documented, stored and conveyed within organizations (Smith 2001; Bencsik 2016). Nowadays, technology plays a pivotal role in keeping and disseminating explicit knowledge (Oye et al. 2011). The explicit knowledge resources help to solve various organizational issues, reuse significant information and connect employees in valuable knowledge-sharing networks (Smith 2001).

Knowledge transfer can be described as a process, in which one person receives and reuses obtained information (Kumar, Ganesh 2009), to solve problems and implement new procedures and processes (Wang, Noe 2010). Knowledge transfer occurs in the workplace, in the form of shared documents, reports, ideas and expertise. Knowledge can be conveyed both through formal and informal channels (Holste, Fields 2010; Chen et al. 2011). Knowledge transfer is a dynamic process which occurs within organizations (between employees) as well as outside organizations (between customers, companies, stakeholders) (Loon 2019; Muñoz – Pascual et al. 2020). Knowledge transfer refers to both kinds of knowledge: tacit and explicit (Balle et al. 2019). Employee involvement in collective tasks, interests and goals increases the likelihood of successful knowledge transfer (Singh Sandhawalia, Dalcher 2011). Furthermore, knowledge transfer is an important part of employee development by improving their creativity, effectiveness and status (Chae et al. 2019), as well as job satisfaction (Cugueró-Escofet et al. 2019).

Explicit knowledge transfer is a key challenge employees are facing in current organizations (Szulanski 2000; Gou et al. 2019). Some studies suggest that sixty per cent of employees found it difficult to obtain information from colleagues (Inefficient Knowledge Sharing Costs Large Businesses \$47 Million Per Year <https://www.prnewswire.com/news-releases/inefficient-knowledge-sharing-costs-large-businesses-47-million-per-year-300681971.html>). Nevertheless, it has been confirmed that the effectiveness of an explicit knowledge application depends on its fluent transfer between employees (Sung, Choi 2018; Chae et al. 2019). Hence, it is important that managers facilitate explicit knowledge transfer in organizations. Managers should apply practices that motivate and encourage employees to share knowledge. (Mahdi et al. 2019; Donnelly 2019). This might not only improve the organization's effectiveness but also contribute to a new knowledge creation (Nonaka, Takeuchi 1995), and consequently it may enhance the company's sustainability potential (Muñoz – Pascual et al. 2020).

According to CT, collaborative work results in more effective outcomes than working individually (Chen et al. 2010). The collaboration process decreases the pressure and dissonance between individual and collective goals (Axelord 2000). CT assumes that collective goals in an organization affect employee behaviours, including knowledge sharing attitudes (Lu et al. 2010).

Managers should also consider the impact of behavioural norms on explicit knowledge sharing in organizations (Malik 2019; Cugueró-Escofet et al. 2019). Additionally, assistance in creating, storing and using explicit knowledge by establishing a knowledge system in an organization can encourage knowledge sharing between employees (Reychav, Weisberg 2010; Friedrich et al. 2020). However, research indicates that such systems (e.g. ERP, data base, document management system) are not necessarily motivating employees to engage in knowledge sharing (Reychav, Weisberg 2010). Hence, the need for identifying different factors facilitating knowledge transfer in organizations.

The setting of collaborative work has been recognized as a significant knowledge sharing enabler (Farhan et al. 2016). Indeed, the relational factor has been identified as a core facet in enhancing knowledge transfer (Barbolla, Corredera 2009; Ferraris et al. 2018). Hence, relationships between employees are an important element which may help to bridge the gap between technology and knowledge transfer in an organization. Therefore, relationships built on collaboration in a workplace should strengthen knowledge sharing. Workplace collaboration enhances knowledge transfer because it provides mutual understanding of the operational context (McInerney, Day 2007). Further, the collaboration process can contribute to the strengthening of employee relationships, engagement and increased inter-organizational trust (Bulińska-Stangrecka, Bagieńska 2018). Moreover, CT (Lu et al. 2010) highlights that collaboration builds commitment to collective goals, which promotes knowledge transfer between employees. Consequently, this study assumes that workplace collaboration influences explicit knowledge transfer.

H3: Workplace collaboration positively influences explicit knowledge transfer

3. Research design

The design of this study draws on RBV and CT. The research model in this study assumes that ER has an effect on the organization’s sustainability potential. The workplace collaboration is positioned between these two variables to reflect the influence of ER on workplace collaboration, and this is illustrated in the hypothesised relationships. Additionally, the study assumes that collaboration strengthens explicit knowledge transfer as shown in Figure 1.

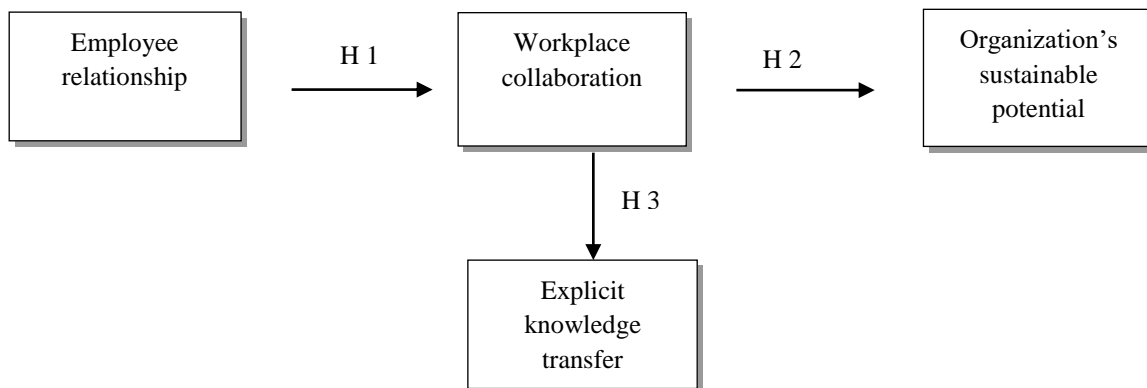


Fig. 1. Research model

3.1. Research context

The telecommunications sector is a dynamic industry, leading in digital transformation (www.The top 3 telecom trends for 2020). It has been characterized as an innovative sector (www.Innovation in the Telecoms world). State-of-the-art technologies and solutions have been developed on the basis of new knowledge creation and refinement. Digital revolution enables fast information flow and exchange of ideas (Buda et al. 2020). Therefore,

intangible resources are crucial for telecommunications companies to achieve a competitive advantage. Hence, this study focuses on this innovative sector, where the intangible resources play a crucial role in an organization's sustainable development.

4. Research methodology

The quantitative approach was used in this study. A survey has been conducted to gather information from employees from the Telecommunication Sector in Poland. The data was collected using self-reported measures. This method can be effectively applied when a large sample is involved (Cameron, Price 2009).

All items were measured using a five-point Likert scale in which 1 means “strongly disagree” and 5 means “strongly agree”. Employee relationships were measured using three statements: “I have a good relationship with my co-workers”; “I have a sense of mutual support in my organization”; “I perceive my organization as a community”. The variable of workplace collaboration was measured using four statements based on Bond-Barnard et al. (2018) where a four-item team collaboration instrument was used. It involved four items: “Employees in my organization are committed to achieving team goals”, “Employees in my organization work together as a team to achieve a common goal,” “Employees in my organization coordinate team efforts to achieve a common goal,” and “The collaboration in my team is effective.” The organization's sustainability potential was measured by three statements, based on Ramos and Caeiro (2010) and includes the following items: “My organization is capable of achieving its goals”; “My organization is capable of coping with difficulties”; “My organization is able to deal with unforeseen circumstances”. The variable of explicit knowledge was measured using three statements: “In my organization, employees share work instructions”, “In my organization employees share work-related documentation”, “In my organization employees prepare guides and instruction for others in regard to their work tasks”.

4.1. Procedure

The questionnaire was distributed to respondents and included the information that their answers and identities will remain anonymous. In total, 175 answers were deemed suitable for further analysis. All data was transferred into an Excel spreadsheet.

4.2. Participants

The demographic profile of participants are as follows: gender distribution showed an acceptable balance: 65.14 per cent of the sample were men and 34.86 women. 60 per cent of the survey population had professional experience of over 10 years, whereas 22.86 per cent had between 1-5 years, and 13.71 per cent had 6-10 years of professional experience, and only 3.43 per cent had less than a year's experience. Directors made up 5.14 per cent of the sample in regard to position in an organization, while the most substantial group were specialists (67.43 per cent), 18.29 were classified as managers, 3.43 per cent as experts, 1.71 per cent as analysts, 0.57 per cent as assistants and 3.43 as others. Employees with a master's degree consisted of 67.43 per cent of the population, 17.71 had a bachelor degree, 11.43 an engineer's degree, 1.14 had high school diplomas and 2.29 didn't specify.

4.3. Data analysis

Structural equation modelling (SEM) was applied to analyse the hypothesised relationships. The analysis was conducted using a two stage approach according to Hair et al. (2010). The measurement model was developed with Statistica 13 software and R. Then confirmatory factor analysis (CFA) was used to decide whether the variables are reliable. Later, the proposed SEM model fit was evaluated based on a range of incremental fit indices (Hair 2010; Byrne 2010).

5. Results

5.1. Correlation among variables

Correlation among employee relationships, workplace collaboration, the organization’s sustainability potential and explicit knowledge transfer were scrutinized (Table 1). The analysis revealed that there were positive and significant correlations between most variables, which implies that further analysis can be conducted (Brown, Moore 2012). Furthermore, demographic variables (gender, education, position) were not statistically related to the variables within the model (employee relationships, workplace collaboration, sustainability potential and tacit knowledge transfer), therefore they were excluded from further analysis to avoid biased interpretation (Spector, Brannick 2011).

Table 1. Means, Standard Deviations, and Correlations

Correlation Matrix															
Variable	Mean	Standard Deviation	1	2	3	4	5	6	7	8	9	10	11	12	13
1 employee relationship	4.04	1.01	—												
2 employee relationship	3.55	1.12	0.628** *	—											
3 employee relationships	3.90	0.957	0.600** *	0.711***	—										
4 workplace collaboration	3.88	0.984	0.683** *	0.687***	0.671***	—									
5 workplace collaboration	3.82	1.02	0.703** *	0.734***	0.698***	0.904***	—								
6 workplace collaboration	3.99	0.907	0.648** *	0.599***	0.556***	0.689***	0.704***	—							
7 workplace collaboration	4.10	0.916	0.605** *	0.545***	0.536***	0.708***	0.724***	0.775***	—						
8 sustainability potential	4.19	0.793	0.386** *	0.258***	0.320***	0.384***	0.386***	0.345***	0.463***	—					
9 sustainability potential	4.18	0.766	0.370* *	0.261*	0.252*	0.365*	0.330*	0.324*	0.407*	0.726*	—				
10 sustainability potential	4.15	0.781	0.401** *	0.245***	0.250***	0.367***	0.359***	0.326***	0.436***	0.686***	0.761***	—			
11 explicit knowledge transfer	3.71	0.993	0.419** *	0.414***	0.436***	0.359***	0.394***	0.381***	0.310***	0.122	0.122	0.107	—		
12 explicit knowledge transfer	4.05	0.850	0.347** *	0.285***	0.331***	0.316***	0.336***	0.344***	0.333***	0.115	0.111	0.128	0.608***	—	
13 explicit knowledge transfer	3.75	0.974	0.239** *	0.175*	0.245**	0.160*	0.170*	0.213**	0.139	0.064	0.054	0.102	0.496***	0.646***	—

Notes: N=175, * p < .05, ** p < .01, *** p < .001

Source: own elaboration.

5.2. Confirmatory factor analysis

The CFA was performed to ensure a proper fit of the research model. The results of the CFA are exhibited in table 2. All factor loadings were above 0.5, which indicated that all latent variables are adequately represented by indicators. The recommended fit indices are: overall model chi-square (χ^2), degrees of freedom (DF), Root mean square error of approximation (RMSEA), goodness-of-fit index (GFI) and Adjusted goodness-of-fit index (AGFI) (Hair et al. 2010). Final measurement model indices were as follows: CMIN/DF = 1.663, GFI = 0.913 , AGFI= 0.866, RMSEA= 0.062, p = 0.001. All these represent a good fit.

Table 3 illustrates the results of CFA and model estimation. The model validity has been assessed according to Hair et al. (2010). The average variance extracted (AVE) was used to estimate the items' convergent validity. Reliability was evaluated using composite reliability (CR) and Cronbach's alpha measurement. The estimation confirms that the measurement scales are variable and reliable.

Table 2. Results of confirmatory factor analysis

Measures	Items	Factor loadings	t-value	Standard error	Composite reliability	Average variance extracted	Cronbach's alpha
Employee relationships	3	0.797	22.377	0.036	0.848298	0.651	0.844
		0.826	25.606	0.032			
		0.797	22.735	0.035			
Workplace collaboration	4	0.933	64.723	0.014	0.94372449	0.8078665	0.923
		0.957	80.412	0.012			
		0.842	28.507	0.030			
		0.858	30.985	0.028			
Sustainable potential	3	0.808	22.740	0.036	0.88175917	0.71343467	0.887
		0.888	30.389	0.029			
		0.836	25.389	0.033			
Explicit knowledge transfer	3	0.749	16.281	0.046	0.82867691	0.61877267	0.802
		0.874	22.052	0.040			
		0.729	14.601	0.050			

Notes: Chi-square = 98.141, df = 59, chi-square/df = 1.663, p = 0.001, GFI = 0.913, AGFI = 0.866, RMSEA = 0.062.

Source: own elaboration.

5.3. Structural model estimation

Fit indices for the structural model were CMIN/DF = 1.126, RMSEA = 0.027, GFI = 0.980 and AGFI = 0.909, which indicates that the model satisfactory fits the data (Hair et al. 2010). Model fit results are exhibited (table 3).

Table 3. Final structural model fit indices

Indicator	Abbreviation	Recommended value	Authors	Results
Minimum of Discrepancy (χ^2)	CIMIN	<30	Hair et al. 2010	22.53
Degrees of Freedom	df	-	-	20
	CMIN/df	≤ 3	Kline 2011	1.126
p value	p			0.312
Goodness of Fit Index	GFI	>0.90	Hair et al. 2010	0.980
AGFI >0.90				
Adjusted Goodness of Fit Index	AGFI	>0.90	Bentler 1990 Marsh, Balla & McDonald 1988	0.909
Root Mean Square Error of Approximation	RMSEA	<0.05 or 0.08	Hair et al. 2010	0.027

Source: own elaboration.

The hypothesized relationships within the model are summarized in Table 4. It consists of the results of hypothesis testing. Taken together, the results suggest that the research model is an adequate one.

Table 4. Results of hypotheses testing

Hypotheses	Standardized coefficients	t-statistic	p	result
ER->WC	0.837	28.603	0.000	supported
WC->SP	0.489	5.895	0.000	supported
WC->EKT	0.621	8.362	0.000	supported

Notes: ER- employee relationships; WC- workplace collaboration; SP- sustainability potential; EKT –explicit knowledge transfer

Source: own elaboration.

The final structural model illustrating standardized coefficients is exhibited in Figure 2. All relationships were found to be statistically significant.

The H1 hypothesis was supported, and employee relationships were found to affect workplace collaboration ($\beta = 0.837$, $p = 0.000$). This highlights the importance of strong and positive employee relationships for effective collaboration.

The relationship between workplace collaboration and the organization’s sustainability potential was confirmed ($\beta = 0.489$, $p = 0.000$). Thus it indicates the role of workplace collaboration in developing sustainability.

The H3 hypotheses, concerning the relationship between workplace collaboration and explicit knowledge transfer was supported.

The SEM model illustrates the mechanism describing how employees’ relationships and workplace collaboration can support the organization’s sustainability potential.

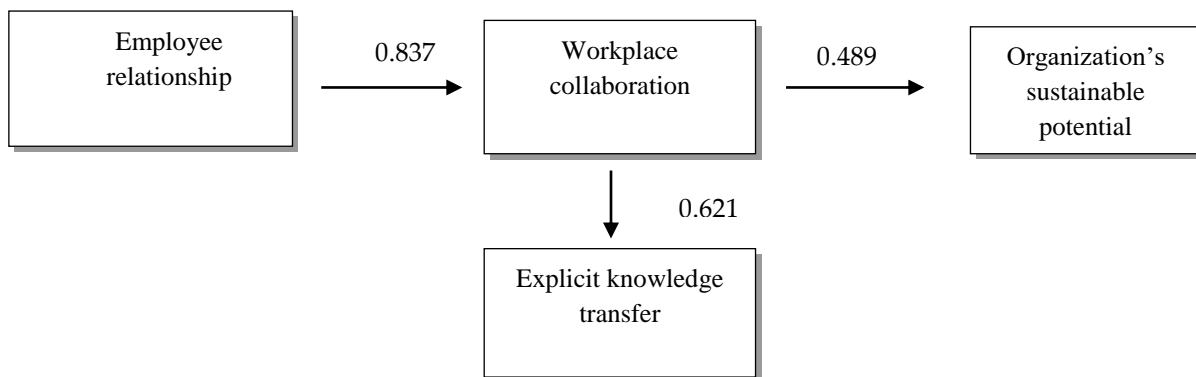


Fig. 2. Structural model

In the structural model, employee relationships has an effect on the workplace collaboration. The workplace collaboration in turn affected the organization’s sustainability potential. Additionally, workplace collaboration also affected explicit knowledge transfer.

6. Discussion

To better understand the role intangible resources play in developing an organization's sustainability potential, this study explored a research model linking employees' relationships and workplace collaboration with the organization's sustainability potential and explicit knowledge transfer. The findings demonstrate that positive employees relations are associated with workplace collaboration. Furthermore, this research shows the positive relationship between workplace collaboration and an organization's sustainability potential. This highlighted the importance of intangible resources in developing an organization's sustainability potential (Monteiro et al. 2017; Franca, Dua 2018; Kamasak 2017). Additionally, this study confirmed the positive impact of workplace collaboration on explicit knowledge transfer. As such, it provides empirical confirmation of the suggested relationship between cooperation and knowledge flow in organizations (Racko et al. 2019; Neiva, Borges 2017).

In this research, the link between employees' relationships and workplace collaboration was found to be statistically significant and a positive relationship was demonstrated. Thus, the importance of human factors in supporting effective workplace collaboration has been confirmed. This is in accordance with the RBT, which assumes intangible resources are key to building competitive advantage (Nason, Wiklund 2018).

The strong, positive relationship between workplace collaboration and an organization's sustainability potential has been confirmed in this study. This emphasises the significance of cooperation for developing sustainability (Wright et al. 2001). These findings imply that managerial practices promoting collaboration may have a considerable influence on an organization's sustainability. This validates previous research indicating that human resources boosts sustainability (Macke, Genari 2019; Langwell, Heaton, 2016). Moreover, this suggests that sustainability can be embedded in human factors such as collaboration and employee relationships. Therefore it can be concluded, that organizations with stronger, positive employee relationships and effective workplace collaboration practices are more likely to successfully develop their sustainability potential.

Finally, the results showed that explicit knowledge transfer is affected by workplace cooperation. Therefore, well maintained employee relationships and cooperation improved knowledge flow in organizations. In other words, when members willingly collaborate and can rely on each other, they will be inclined to share explicit knowledge with others in an organization.

Overall, statistical support for all hypotheses indicates that intangible resources such employee relationships and workplace collaboration can give an organisation an advantage in developing their sustainability potential.

Conclusions

The main objective of this research was to verify the new model of explaining the role of intangible resources in developing an organization's sustainability in the context of RBV theory (Barney et al. 2011). The intangible resources that affect sustainability potential were identified through literature, a research model was constructed and the impact of these factors was measured through SEM. As in previous studies, employee relationships were found to have a significant influence on workplace collaboration, but in this study, further positive consequences for organizations' sustainability potential were indicated.

Empirical evidence indicating that sustainable development of a given organization becomes more likely as the employees' relationships improves, which in turn improves workplace collaboration. Further, an effective workplace collaboration facilitates explicit knowledge transfer in organizations. These findings address the literature gap regarding the resources which can assist an organization's sustainability potential.

It is clear from this research that there are managerial practices oriented toward the effective management of intangible resources which can support sustainability. Promotion of positive, strong employee relationships in an organization enhances its sustainability potential. Moreover, good collaborative practices can encourage better knowledge sharing and sustainable competitive advantage. Greater sustainability potential helps organizations to better deal with unknown problems and face future challenges (Broman, Robert 2017). Hence, improved comprehension of human resource practices can support sustainability strengthening organizations' potential to avoid prospective difficulties and prevent damages. This research also suggests that maintaining positive relationships between organization's members would enhance its sustainable development.

Overall, this research has important implications for both theory and practice. The theoretical implications refer to the empirical confirmation of the RBV theory approach toward the essential role of human resource management in developing a sustainable competitive advantage (Wright et al. 2001; Colbert 2004). This study highlights the importance of intangible resources such as employee relationships and workplace collaboration in having a better adjustment to a changeable economic environment. Further, this study applies the RBV theory and CT to illustrate the conceptual and practical implications of intangible resources for developing sustainability. Additionally, this study proposes a research model linking employees' relationships, workplace collaboration with an organization's sustainability potential and explicit knowledge transfer. This model proposes a framework from which managers and researchers can better understand the importance of human resources in developing sustainability.

The practical contributions of this study are that by promoting positive relationships among co-workers, the likelihood of the company's success would improve. Managers could also consider the impact of workplace collaboration on the organization's sustainability potential and its relationship with explicit knowledge transfer. Furthermore, there is a particularly strong relationship between workplace collaboration and sustainability potential. This indicates how effective management of the cooperation processes strengthens the company's sustainable competitive advantage. The results of this study also provides an insight into the implication of human resource management for an organization's sustainability. This includes implementation of managerial practices strengthening the positive relationship between employees, as well as improving the organization of cooperation in teams. From a managerial perspective, the empirical verification of human resource practices concerning employee relationships and workplace collaboration, as the sources of the organization's sustainability potential provides a valuable clue for managers. This study emphasizes the role of employees' relationships and collaboration in developing sustainability.

It would be advantageous for future research to include different sectors. Also, qualitative research would provide a more in-depth comprehension of the role of intangible resources in developing sustainability. Further research should focus on using qualitative methods to explore the significance of employees' relationships and workplace collaboration. Additionally, the analysis of organizations' sustainable potential needs further consideration from multiple perspectives and across various contexts. For instance, what are other intangible antecedents of organization sustainability? Do other human resources practices drive organizational sustainability? Future research can explore additional antecedents of organizational sustainability. This complex assessment of HR practices would allow managers to implement relevant, sustainability-oriented HR strategies in organizations. Furthermore, another path for research can examine how the use of technology can impact the link between employee relationships, workplace collaboration and sustainable potential. Additionally, further, longitudinal analysis of this mechanism can provide broader data regarding this link in various contexts.

References

- Abugre, J. 2017. Relations at workplace, cynicism and intention to leave: A proposed conceptual framework for organisations. *International Journal of Organizational Analysis*, 25(2), 198-216. <https://doi.org/10.1108/IJOA-09-2016-1068>
- Afflerbach, T. Theory: Challenges for Cooperation. In: Hybrid Virtual Teams in Shared Services Organizations. Progress in IS. Springer, Cham 2020, 9-50. https://doi.org/10.1007/978-3-030-34300-2_2
- Ahmad, S. 2015. Green Human Resource Management: Policies and practices. *Cogent Business & Management*, 2, 1030817, <http://dx.doi.org/10.1080/23311975.2015.1030817>
- Anggraeni, A.I. 2018. Millennial and Psychological Contract: Social Constructivist Approach. In: *Psychology of Retention Theory, Research and Practice*, Coetzee M.; Potgieter I.L.; Ferreira N. Eds., Springer International Publishing, Switzerland AG; 289-306. https://10.1070/978-3-319-98920-4_14
- Armstrong, M. 2006. *A handbook of Human Resource Management Practice* 10 th edition, Kogan Page, London and Philadelphia.
- Asghar, B., Wasim, A., Jahanzaib, M. & Hussain, S. 2016. Impact of Privatization on Employee Relations at Pakistan Telecommunication Company Limited. *The Nucleus*, 53(4), 243-253. ISSN: 2306-6539
- Axelord, R. 2000. On Six Advances in Cooperation Theory. *Analyse & Kritik*, 22, 130-151. Available online: <https://www.degruyter.com/downloadpdf/j/auk.2000.22.issue-1/auk-2000-0107/auk-2000-0107.pdf>
- Balle, A., Steffen, M., Curado, C., & Oliveira, M. 2019. Interorganizational knowledge sharing in a science and technology park: the use of knowledge sharing mechanisms. *Journal of Knowledge Management*, 23(10), 2016-2038. <https://doi.org/10.1108/JKM-05-2018-0328>
- Barbolla, A., & Corredera, J. 2009. Critical factors for success in university-industry research projects. *Technology Analysis & Strategic Management*, 21(5), 599-616. <https://doi.org/10.1080/09537320902969133>
- Barney, J. B., Ketchen, D. J., & Wright, M. 2011. The Future of Resource-Based Theory: Revitalization or Decline? *Journal of Management*, 37(5), 1299-1315. <https://doi.org/10.1177/0149206310391805>
- Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Baumgartner, R. J., & Rauter, R. 2017. Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production*, 140, 81-92. <https://doi.org/10.1016/j.jclepro.2016.04.146>
- Bencsik, A. 2016. Knowledge management initiatives and strategies in small and medium enterprises, Hershey, IGI Global
- Benn, S., Edwards, M., & Williams, T. 2014. *Organizational Change for Corporate Sustainability*. London, Routledge. <https://doi.org/10.4324/9781315819181>
- Bentler, P.M. 1990. Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246. <https://doi.org/10.1037/0033-2909.107.2.238>
- Bierly, P. E., Damanpour, F., & Santoro, M. D. 2009. The application of external knowledge: Organizational conditions for exploration and exploitation. *Journal of Management Studies*, 46(3), 481-509. <https://doi.org/10.1111/j.1467-6486.2009.00829.x>
- Blyton, P., & Turnbull, P. 1998. Employee relations. In: *The Theory and Context of Employee Relations*, 2nd ed.; Blyton, P.; Turnbull, P., Eds.; Macmillan Publishers Limited, Palgrave, London, 3-14. <https://doi.org/10.1007/978-1-349-14314-6>
- Bolisani, E., & Bratianu, C. 2017. Knowledge strategy planning: An integrated approach to manage uncertainty, turbulence, and dynamics. *Journal of Knowledge Management*, 21(2), 233-253. <https://doi.org/10.1108/JKM-02-2016-0071>
- Bombiak E., & Marciniuk-Kluska, A. 2018. Green Human Resource Management as a Tool for the Sustainable Development of Enterprises: Polish Young Company Experience. *Sustainability*, 10(6), 1739; <https://doi.org/10.3390/su10061739>

- Bond-Barnard, T.J., Fletcher L., & Steyn H. 2018. Linking trust and collaboration in project teams to project management success. *International Journal of Managing Projects in Business*, 11(2), 432-457. <https://doi.org/10.1108/IJMPB-06-2017-0068>
- Bosse D.A., & Coughlan R. 2016. Stakeholder Relationship Bonds. *Journal of Management Studies*, 53(7), 1197-1222. <https://doi.org/10.1111/joms.12182>
- Brander J.A., Zhang W. 2017. Employee relations and innovation: an empirical analysis using patent data. *Economics of Innovation and New Technology*, 26(4), 368- 384, <https://doi.org/10.1080/10438599.2016.1202523>
- Broman, G.I., & Robèrt, K.H. 2017. A framework for strategic sustainable development. *Journal of Cleaner Production*, 140(1), 17-31. <https://doi.org/10.1016/j.jclepro.2015.10.121>
- Brown, T. A., & Moore, M. T. 2012. Confirmatory factor analysis. In: *Handbook of structural equation modelling*, R. H. Hoyle Ed. NY: The Guilford Press, 361–379.
- Buda, G.; Pethes, B.; & Lehota, J. 2020. Dominant Consumer Attitudes in the Sharing Economy—A Representative Study in Hungary. *Resources* 9, 1. <https://doi.org/10.3390/resources9010001>
- Bulińska-Stangrecka, H.; & Bagińska, A. 2018. Investigating the Links of Interpersonal Trust in Telecommunications Companies, *Sustainability*, 10(7): 1-17, <https://doi:10.3390/su10072555>
- Bulińska-Stangrecka H.; & Bagińska A. 2019. HR Practices for Supporting Interpersonal Trust and Its Consequences for Team Collaboration and Innovation. *Sustainability* 11(16): 4423. <https://doi.org/10.3390/su11164423>
- Bundy, J.; Vogel, R.M.; & Miles Z.A. 2018. Organization–stakeholder fit: A dynamic theory of cooperation, compromise, and conflict between an organization and its stakeholders. *Strategic Management Journal* 39: 476–501, <https://doi.org/10.1002/smj.2736>
- Burvill S.M., Jones-Evans D., & Rowlands H. 2018. Reconceptualising the principles of Penrose’s (1959) theory and the resource based view of the firm, *Journal of Small Business and Enterprise Development* 25(6): 930-959. <https://doi.org/10.1108/JSBED-11-2017-0361>
- Byrne, B.M. 2010. *Structural Equation Modelling with AMOS*, 2nd edition, Routledge Taylor & Francis Group NY. ISBN 978-0-8058-6372-7
- Cameron, S.; & Price, D. 2009. *Business Research Methods. A Practical Approach*. London. CIPD/McGraw-Hill.. ISBN: 9781843982289.
- Campbell, J. M.; & Park, J. 2017. Extending the resource-based view: Effects of strategic orientation toward community on small business performance, *Journal of Retailing and Consumer Services*, 34(C): 302-308, <https://doi.org/10.1016/j.jretconser.2016.01.013>
- Caniglia, G.; John, B.; Bellina, L.; Lang D.J.; Wiek, A.; Cohmer, S.; & Laubichler, M.D. 2018. The glocal curriculum: A model for transnational collaboration in higher education for sustainable development, *Journal of Cleaner Production* 171: 368-376. <https://doi.org/10.1016/j.jclepro.2017.09.207>
- Cantele S.; & Zardini, A. 2018. Is sustainability a competitive advantage for small businesses? An empirical analysis of possible mediators in the sustainability–financial performance relationship, *Journal of Cleaner Production* 182(1): 166-176. <https://doi.org/10.1016/j.jclepro.2018.02.016>
- Castilla-Polo, F.; & Gallardo-Vázquez, D. 2016. The main topics of research on disclosures of intangible assets: a critical review, *Accounting, Auditing & Accountability Journal* 29(2): 323-356. <https://doi.org/10.1108/AAAJ-11-2014-1864>
- Cegarra-Navarro J.G.; Soto-Acosta P.; & Wensley A.K.P. 2016. Structured knowledge processes and firm performance: The role of organizational agility, *Journal of Business Research* 69: 1544-1549, <http://dx.doi.org/10.1016/j.jbusres.2015.10.014>
- Černevičiūtė, J.; & Strazdas, R. 2018. Teamwork management in Creative industries: factors influencing productivity, *Entrepreneurship and Sustainability* 6(2): 503-516. [https://doi.org/10.9770/jesi.2018.6.2\(3\)](https://doi.org/10.9770/jesi.2018.6.2(3))
- Chae H.; Park J.; & Choi J.N. 2019. Two facets of conscientiousness and the knowledge sharing dilemmas in the workplace: Contrasting moderating functions of supervisor support and coworker support. *Journal of Organizational Behavior* 40: 387–399. <https://doi.org/10.1002/job.2337>

- Chen G.; Ling W.; Yang S.; Tang S.; & Wu W. 2011. Explicit Knowledge and Tacit Knowledge Sharing, *International Conference on Management and Service Science*, Wuhan, 1-4. <https://doi.org/10.1109/ICMSS.2011.5998951>
- Chen N.Y.F.; Chao, M.C.H.; & Tjosvold, D. 2010. Developing the strategic resources of Chinese entrepreneurial firms, *Leadership & Organization Development Journal* 31(3): 213-229. <https://doi.org/10.1108/01437731011039334>
- Chen, H.; Wei, J.; Wang K.; & Peng Y. 2016. Does Employee Relationship Quality Influence Employee Well-Being? An Empirical Analysis Based on Manufacturing and Service Industries, *Human Factors and Ergonomics in Manufacturing & Services Industries* 26(5): 559-576. <https://doi.org/10.1002/hfm.20674>
- Chen, C.D.; Zhao, Q.; Wang, J.L.; Huang, C.K.; & Lee, N., 2017. Exploring Sharing Economy Success: Resource-Based View and the Role of Resource Complementarity in Business Value Co-Creation, PACIS 2017, <http://aisel.aisnet.org/pacis2017/169>
- Clipa, A.-M.; Clipa, C.-I.; Danileț, M.; & Andrei, A.G. 2019. Enhancing Sustainable Employment Relationships: An Empirical Investigation of the Influence of Trust in Employer and Subjective Value in Employment Contract Negotiations. *Sustainability* 11(8): 4995. <https://doi.org/10.3390/su11184995>
- Colbert B.A. 2004. The Complex Resource-Based View: Implications For Theory And Practice In Strategic Human Resource Management, *Academy of Management Review* 29(3): 341-358. <https://doi.org/10.5465/amr.2004.13670987>
- Conway, E.; Fu, N. Monks, K.; Alfes, K.; & Bailey C. 2016. Demands or Resources? The Relationship Between HR Practices, Employee Engagement, and Emotional Exhaustion Within a Hybrid Model of Employment Relations, *Human Resources Management* 55(5): 901-917, <https://doi.org/10.1002/hrm.21691>
- Cosenz, F.; Rodrigues, V.P.; & Posati, F. 2019. Dynamic business modelling for sustainability: Exploring a system dynamics perspective to develop sustainable business models, *Business Strategy and the Environment* 1–14. <https://doi.org/10.1002/bse.2395>
- Cugueró-Escofet, N.; Ficapal-Cusí, P.; & Torrent-Sellens, J. 2019. Sustainable Human Resource Management: How to Create a Knowledge Sharing Behavior through Organizational Justice, Organizational Support, Satisfaction and Commitment. *Sustainability* , 11: 5419. <https://doi.org/10.3390/su11195419>
- Cummins F., 2017. *Building the Agile Enterprise With Capabilities, Collaborations and Values*, 2nd ed.; MK/OMG Press, Elsevier, 1-34. <https://doi.org/10.1016/B978-0-12-805160-3.00001-6>
- da Silva Batista A.A.; de Francisco A.A. 2018. Organizational Sustainability Practices: A Study of the Firms Listed by the Corporate Sustainability Index, *Sustainability* 10(1): 226; <https://doi.org/10.3390/su10010226>
- De Massis A.; Audretsch D.; Uhlaner L.; & Kammerlander N. 2018. Innovation with Limited Resources: Management Lessons from the German Mittelstand, *Production Innovation Management* 35(1): 125-146. <https://doi.org/10.1111/jpim.12373>
- de Souza Freitas R.W.; Chiappetta Jabbour, C. J.; & Almada Santos, F.C. 2011. Continuing the evolution: towards sustainable HRM and sustainable organizations, *Business Strategy Series* 12(5): 226-234. <https://doi.org/10.1108/17515631111166861>
- Deutsch, M. 1949. A theory of cooperation and competition. *Human Relations*, 2: 129-152.
- Donnelly R. 2019. Aligning knowledge sharing interventions with the promotion of firm success: The need for SHRM to balance tensions and challenges, *Journal of Business Research* 94: 344-352, <https://doi.org/10.1016/j.jbusres.2018.02.007>
- Farhan, A.; Shahzad, K.; Haris, A.; Bajwa S.U.; & Rabia, B. 2016. The role of collaborative culture in knowledge sharing and creativity among employees, *Pakistan Journal of Commerce and Social Science* 10(2): 335-358. Retrieved from: <https://www.econstor.eu/bitstream/10419/188256/1/pjcss295.pdf>
- Fazlagić, J.; & Skikiewicz, R. 2019. Measuring sustainable development - the creative economy perspective. *International Journal of Sustainable Development and World Ecology* 26(7): 635-645. <https://doi.org/10.1080/13504509.2019.1651418>
- Fernandes, C.; Ferreira J.; Veiga P.; Peris-Ortiz M. 2019. Knowledge, innovation and sustainability: past literature and future trends, in M. Peris-Ortiz et al. (eds.): *Knowledge, Innovation and Sustainable Development in Organizations, Innovation, Technology, and Knowledge Management*, Springer, 11-22. https://doi.org/10.1007/978-3-319-74881-8_2

- Ferraris, A.; Santoro, G.; & Scuotto, V. 2018. Dual relational embeddedness and knowledge transfer in European multinational corporations and subsidiaries, *Journal of Knowledge Management*, (in press). <https://doi.org/10.1108>
- Ferreira, J.; & Fernandes, C. 2017. Resources and capabilities' effects on firm performance: what are they? *Journal of Knowledge Management* 21(5): 1202-1217. <https://doi.org/10.1108/JKM-03-2017-0099>
- Franca, A.; & Dua O.L. 2018. Relationship between intangible resources, absorptive capacities and export performance, *Tourism & Management Studies* 14(1): 94-107. <https://doi.org/10.18089/tms.2018.14108>
- Friedrich J.; Becker M.; Kramer F.; Wirth M.; & Schneider M. 2020. Incentive design and gamification for knowledge management, *Journal of Business Research* 106, 341-352, <https://doi.org/10.1016/j.jbusres.2019.02.009>
- García-Cabrera, A.M.; García-Soto, M.G.; & Suárez-Ortega, S.M. 2017. Macro-level spillovers and micro-level capabilities as antecedents of young SMEs' propensity to export and to become a born global. *International Entrepreneurship and Management Journal*, 13(4): 1199–1220. <https://doi.org/10.1007/s11365-017-0451-x>
- Gerards, R.; de Grip, A.; & Baudewijns, C. 2018. Do new ways of working increase work engagement?, *Personnel Review*, 47(2): 517-534. <https://doi.org/10.1108/PR-02-2017-0050>
- Gou, J.; Li, N.; Lyu, T.; Lyu, X.; & Zhang, Z. 2019. Barriers of knowledge transfer and mitigating strategies in collaborative management system implementations, *VINE Journal of Information and Knowledge Management Systems* 49(1): 2-20. <https://doi.org/10.1108/VJKMS-09-2018-0072>
- Grant, R.M. 1996. Toward a knowledge-based theory of the firm, *Strategic Management Journal* 17(2): 109-122.
- Hair, J.; Black W.; Babin B.; & Anderson, R. 2010. *Multivariate Data Analysis* 7th ed., Edinburgh Gate, Harlow, Essex UK, Pearson Education Limited. ISBN 10: 1-292-02190-X
- Heavey, C.; & Murphy E. 2012. A proposed cooperation framework for organisations and their leaders, *Management Decision* 50(6): <https://doi.org/10.1108/00251741211238292>
- Holste J.S.; & Fields D. 2010. Trust and tacit knowledge sharing use, *Journal of knowledge Management* 14(1): 128-140, <https://doi.org/10.1108/13673271011015615>
- Inefficient Knowledge Sharing Costs Large Businesses \$47 Million Per Year. Retrieved from: <https://www.prnewswire.com/news-releases/inefficient-knowledge-sharing-costs-large-businesses-47-million-per-year-300681971.html>.
- Innovation in the Telecoms world. Retrieved from: <https://telecomworld.itu.int/blog/innovation-in-the-telecoms-world/>
- Jasimuddin S.M.; Klein J.H.; & Connell C., 2005. The paradox of using tacit and explicit knowledge Strategies to face dilemmas, *Management Decision* 43(1): 102-112. <https://doi.org/10.1108/00251740510572515>
- Jasińska, M. 2019. Recognition and description of synergy conditions in team work in view of the grounded theory, *Entrepreneurship and Sustainability* 7(1): 375-397. [https://doi.org/10.9770/jesi.2019.7.1\(27\)](https://doi.org/10.9770/jesi.2019.7.1(27))
- Johnson, D. W.; & Johnson, R. 1989. *Cooperation and competition: Theory and research.*, Edina, MN, Interaction Book Company ISBN 0939603101
- Johnson, D. W.; & Johnson, R. 1999. Making cooperative learning work, *Theory into Practice* 38(2): 67-73. <https://doi.org/10.1080/00405849909543834>
- Kamasak, R. 2017. The contribution of tangible and intangible resources, and capabilities to a firm's profitability and market performance, *European Journal of Management and Business Economics* 26(2): 252-275. <https://doi.org/10.1108/EJMBE-07-2017-015>
- Khan, S.Z.; Yang, Q.; & Waheed, A. 2019. Investment in intangible resources and capabilities spurs sustainable competitive advantage and firm performance, *Corporate Social Responsibility and Environment Management* 26(2): 285-295. <https://doi.org/10.1002/csr.1678>
- Kim, D.O.; & Bae, J. 2017. *Employment Relations and HRM in South Korea*. Routledge, London. <https://doi.org/10.4324/9781315256566>

- Klier, H.; Schwens, C.; Zapkau, F. B.; & Dikova, D. 2017. Which resources matter how and where? A meta-analysis on firms' foreign establishment mode choice. *Journal of Management Studies* 54(3): 304-339. <http://dx.doi.org/10.1111/joms.12220>
- Kline R.B. 2011. Principles and practice of structural equation modeling. 3rd ed., NY, USA, Guilford Press. ISBN 978-1-60623-877-6.
- Kooij, D.; Paauwe, J.; Sanders, K.; López-Cabrales, A.; Valle, R.; & Galan, J. 2011. Employment relationships as drivers of firm flexibility and learning, *Personnel Review* 40(5): 625-642. <https://doi.org/10.1108/00483481111154478>
- Kristandl, G.; Bontis, N. Constructing a definition for intangibles using the resource based view of the firm, *Management Decision* 2007 45(9): 1510-1524. <https://doi.org/10.1108/00251740710828744>
- Kumar, A., & Ganesh, L. 2009. Research on Knowledge Transfer in Organizations: A Morphology, *Journal of Knowledge Management* 13(4): 161-174.
- Kwon, B.; Farndale, E. & Park J.G. 2016. Employee voice and work engagement: Macro, meso, and micro-level drivers of convergence? *Human Resource Management Review* 26(4): 327-337, <https://doi.org/10.1016/j.hrmr.2016.04.005>
- Langwell, C., & Heaton, D. 2016. Using human resource activities to implement sustainability in SMEs, *Journal of Small Business and Enterprise Development*, 23(3), 652-670. <https://doi.org/10.1108/JSBED-07-2015-0096>
- Lee, V.H.; Foo, A.T.L.; Leong, L.Y.; & Ooi K.B. 2016. Can competitive advantage be achieved through knowledge management? A case study on SMEs, *Expert systems with Applications* 65: 136-151. <https://doi.org/10.1016/j.eswa.2016.08.042>
- Li W. 2018. On D Enterprise Employee Relations, *Advances in Social Science, Education and Humanities Research* 250: 273-276, <https://doi.org/10.2991/emim-18.2018.55>
- Lin, H.; Zeng, S.X.; Liu, H.J.; & Li, C. 2018. Bridging the gaps or fecklessness? A moderated mediating examination of intermediaries' effects on corporate innovation. *Technovation*. (in press): <https://doi.org/10.1016/j.technovation.2018.02.006>
- Liu, Y.; Kim, J.; & Yoo, J. 2019 Intangible Resources and Internationalization for the Innovation Performance of Chinese High-Tech Firms. *J. Open Innov. Technol. Mark. Complex*, 5(52). <https://doi.org/10.3390/joitmc5030052>
- Loon M., 2019. Knowledge management practice system: Theorising from an international meta-standard, *Journal of Business Research* 94: 432-441 <https://doi.org/10.1016/j.jbusres.2017.11.022>
- Lorincová, S.; Štarchoň, P.; Weberová, D.; Hitka, M.; & Lipoldová, M. 2019. Employee Motivation as a Tool to Achieve Sustainability of Business Processes. *Sustainability* 11(13): 3509. <https://doi.org/10.3390/su11133509>
- Lu, J.F.; Tjosvold, D.; & Shi, K. 2010. Team Training in China: Testing and Applying the Theory of Cooperation and Competition *Journal of Applied Social Psychology* 40(1): 101–134. <https://doi.org/10.1111/j.1559-1816.2009.00565.x>
- Macke, J.; & Genari, D. 2019. Systematic literature review on sustainable human resource management, *Journal of Cleaner Production* 208: 806-815. <https://doi.org/10.1016/j.jclepro.2018.10.091>
- Mahdi O.R.; Nassar I.A.; & Almsafir M. K. 2019. Knowledge management processes and sustainable competitive advantage: An empirical examination in private universities, *Journal of Business Research* 94, 320-334; <https://doi.org/10.1016/j.jbusres.2018.02.013>
- Mahdi, O. R.; Almsafir, M. K.; & Yao, L. 2011. The role of knowledge and knowledge management in sustaining competitive advantage within organizations: A review. *African Journal of Business Management* 5(23): 9912–9931. <https://doi.org/10.1016/j.jbusres.2018.02.013>
- Malik A.; Froese F.J.; & Sharma P. 2019. Role of HRM in knowledge integration: Towards a conceptual framework, *Journal of Business Research* (in press): <https://doi.org/10.1016/j.jbusres.2019.01.029>
- Marsh, H.W., Balla, J.R., & McDonald, R.P. 1988. Goodness-of-fit indexes in confirmatory factor analysis: the effect of sample size. *Psychological Bulletin* 103: 391–410. <https://doi.org/10.1037/0033-2909.103.3.391>
- McInerney C.R.; Day R.E. Eds. 2007. *Rethinking Knowledge Management: From Knowledge Objects to Knowledge Processes*, Berlin, Springer.

- Medne A.; Lapina I. 2019. Sustainability and Continuous Improvement of Organization: Review of Process-Oriented Performance Indicators, *Journal of Open Innovation: Technology, Market and Complexity* 5(3): 49; <https://doi.org/10.3390/joitmc5030049>
- Molloy J.C.; Chadwick, C.; Ployhart R.E.; & Golden S.J. 2011. Making Intangibles “Tangible” in Tests of Resource-Based Theory: A Multidisciplinary Construct Validation Approach, *Journal of Management* 37(5):1496-1518, DOI: 10.1177/0149206310394185
- Monteiro, A.; Soares, A.; & Rua, O. 2017. Linking intangible resources and export performance: The role of entrepreneurial orientation and dynamic capabilities, *Baltic Journal of Management* 12(3): 329-347. <https://doi.org/10.1108/BJM-05-2016-0097>
- Muñoz – Pascual L.; & Galende J.; Curado C. 2020. Human Resource Management Contributions to Knowledge Sharing for a Sustainability-Oriented Performance: A Mixed Methods Approach, *Sustainability* 12: 161; <https://doi.org/10.3390/su12010161>
- Munoz-Pascual L.; & Galende J. 2017. The impact of knowledge and motivation management on creativity, *Employee Relations* 39(5): 732-752. <https://doi.org/10.1108/ER-05-2016-0096>
- Nason, R. S.; & Wiklund, J. 2018. An assessment of resource-based theorizing on firm growth and suggestions for the future. *Journal of Management* 44(1): 32-60. <http://dx.doi.org/10.1177/0149206315610635>
- Nawaz W.; & Koç M. 2019. Exploring Organizational Sustainability: Themes, Functional Areas, and Best Practices, *Sustainability* 11(16): 4307; <https://doi.org/10.3390/su11164307>
- Neiva, F.W.; & Borges, M. R. S. 2017. Split expertise transfer: An innovative collaborative approach to support accelerated expertise transfer, 2017 IEEE 21st International Conference on Computer Supported Cooperative Work in Design (CSCWD): Wellington, New Zealand, 48-53. <https://doi:10.1109/CSCWD.2017.8066669>
- Nijssen M.; Paauwe J. 2012. HRM in turbulent times: how to achieve organizational agility?, *The International Journal of Human Resource Management*, 23(16): 3315-3335. <https://doi.org/10.1080/09585192.2012.689160>
- Nonaka, I.; & Takeuchi, H. 1995. *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York Oxford University Press.
- Obramović, V. & Todorović M., Bushuyev S. 2019. Sustainability and Agility in Project Management: Contradictory or Complementary? In Conference on Computer Science and Information Technologies CSIT 2018: Advances in Intelligent Systems and Computing III Shakhovska N., Medykovskyy M.O. Eds., Springer, Cham, 522-532. <https://doi.org/10.1109/STC-CSIT.2018.8526666>
- Okpara, J.O. 2015. *Exploring the Effects of Intangible Resources on Competitive Advantage and Performance of Listed Firms in Nigeria..* Available online: <https://pdfs.semanticscholar.org/9481/8d3a725e6877f000f137765d87e2cdc6f5ee.pdf>
- Østergaard, C.R.; & Drejer, I. 2017. *The Role of Mobility and Employee-Driven Relations for University-Industry Collaboration on Innovation*. 2017. AAG Annual Meeting, Boston, United States.
- Oye, N.D.; & Mazleena S.; Noorminshah A. 2011. Knowledge Sharing in Workplace: Motivators and Demotivators, *IJMIT*, 4(4): <https://doi.org/10.5121/ijmit.2011.3406>
- Pearson, J.; Pitfield, D.; & Ryley, T. 2015. Intangible resources of competitive advantage: Analysis of 49 Asian airlines across three business models, *Journal of Air Transport Management* 47(C): 179-189. <https://doi.org/10.1016/j.jairtraman.2015.06.002>
- Pellegrini C.; Rizzi, F.; & Frey M. 2018. The role of sustainable human resource practices in influencing employee behaviour for corporate sustainability, *Business Strategy and the Environment* 27: 1221-1232. <https://doi.org/10.1002/bse.2064>
- Polanyi, M. 1962. *Personal knowledge: Towards a post-critical philosophy*, Routledge & Kegan Paul Ltd., London., ISBN 0-203-75039-X
- Ponce, R.S.; Cancio, J.A.P.; & Sánchez, J.E. 2018. The capabilities approach and values of sustainability: Towards an inclusive Pedagogy. *Journal of Innovation & Knowledge* 3(2): 76–81. <https://doi.org/10.1016/j.jik.2017.12.008>
- Pop, I.G.; Talpos F.; & Prisac, I. A. 2015. Transdisciplinary Approach on the Advanced Sustainable Knowledge Integration, *Proceedings of the IETEC-BRCEBE Conference*, Sibiu, Romania. <https://doi.org/10.1515/cplbu-2015-0025>

- Racko, G.; Oborn E.; & Barrett, M. 2019. Developing collaborative professionalism: an investigation of status differentiation in academic organizations in knowledge transfer partnerships, *The International Journal of Human Resource Management* 30(3): 457-478, <https://doi.org/10.1080/09585192.2017.1281830>
- Ramos, T.B.; & Caeiro, S. 2018. Meta-evaluation of sustainability indicators. In: *Routledge Handbook of Sustainability Indicators*, Bell, S.; Morse S. Eds. 1st ed., London, UK, Imprint Routledge chapter 32, 497-511, <https://doi.org/10.4324/9781315561103-32>
- Reychav I.; & Weisberg J.; 2010. Bridging intention and behaviour of knowledge sharing, *Journal of Knowledge Management* 14(2): 285-300, <https://doi.org/10.1108/13673271011032418>
- Sahoo, R.; & Sahoo, C., 2018. Employer–employee relations in a state-owned power sector undertaking: an analysis, *Industrial and Commercial Training* 50(7/8): 369-379. <https://doi.org/10.1108/ICT-11-2017-0094>
- Samwel J.O. 2018. Effect of Employee Relations on Employee Performance and Organizational Performance-Study of Small Organizations in Tanzania, *Global Journal of Management and Business Research: A Administration and Management*, 18(8): ISSN: 2249-4588
- Shagholi, R.; Hussin, S.; Siraj S.; Naimie, Z.; Assadzadeh, F.; & Moayed, F. 2010. Value creation through trust, decision making and teamwork in educational environment, *Procedia – Social and Behavioral Science* 2: 255–259, <https://doi.org/10.1016/j.sbspro.2010.03.007>.
- Singh Sandhawalia, B.; & Dalcher, D. 2011. Developing knowledge management capabilities: a structured approach, *Journal of Knowledge Management* 15(2): 313 - 328. <https://doi.org/10.1108/1367327111119718>
- Smith E.A., 2001. The role of tacit and explicit knowledge in the workplace, *Journal of Knowledge Management* 5(4): 311-321.
- Spector, P. E.; & Brannick, M. T. 2011. Methodological Urban Legends: The Misuse of Statistical Control Variables. *Organ. Res. Methods* 14(2): 287–305. <https://doi.org/10.1177/1094428110369842>
- Stankevičiūtė, Ž.; & Savanevičienė, A. 2018. Designing Sustainable HRM: The Core Characteristics of Emerging Field. *Sustainability*, 10(12): 4798. <https://doi.org/10.3390/su10124798>
- Sung, S. Y.; & Choi, J. N. 2018. Building knowledge stock and facilitating knowledge flow through HRM practices toward firm innovation. *Human Resource Management* 57(6): 1429-1442. <https://doi.org/10.1002/hrm.21915>
- Szulanski, G. 2000. The Process of Knowledge Transfer: A Diachronic Analysis of Stickiness, *Organizational Behavior and Human Decision Processes* 82(1): 9-27. <https://doi.org/10.1006/obhd.2000.2884>
- Tansel, A. & Gazioğlu S. 2014. Management-employee relations, firm size and job satisfaction, *International Journal of Manpower* 35(8): 1260-1275. <https://doi.org/10.1108/IJM-09-2014-0179>
- Teece, D. J. 1998. Capturing value from knowledge assets the new economy, markets for know how & intangible assets. *California Management Review* 40(3): 55–79.
- Tehseen, S.; Mughal, S. A.; Durst, S.; Shujahat, M.; & Qureshi, Z. H.; Kokkalis, P. 2019. Composition-based view of the firm as a promising approach to studying small businesses. *Production* 29, <https://doi.org/10.1590/0103-6513.20180022>
- The top 3 telecom trends for 2020. Retrieved from: <https://www.information-age.com/top-3-telecom-trends-2020-123463558>
- Tjosvold D. 1984. Cooperation Theory and Organizations, *Human Relations* 37(9): 743-767. <http://dx.doi.org/10.1177/001872678403700903>
- Tjosvold, D. 1998. Making employee involvement work: cooperative goals and controversy to reduce costs, *Human Relations* 51(2): 201-214. <https://doi.org/10.1177/001872679805100205>
- Tjosvold, D.; & Johnson D. 2000. Deutsch's Theory of Cooperation and Competition. In: *Work Teams: Past, Present and Future. Social Indicators Research Series*. Beyerlein M.M. Ed., Springer, Dordrecht, 6: 131-155. https://doi.org/10.1007/978-94-015-9492-9_8
- Tjosvold, D.; & Yu, Z. 2004. Goal Interdependence and Applying Abilities for Team In-Role and Extra-Role Performance in China. *Group Dynamics: Theory, Research, and Practice* 8(2): 98–111. <https://doi.org/10.1037/1089-2699.8.2.98>

van Dam, K.; van Vuuren, T.; & Kemps S. 2017. Sustainable employment: the importance of intrinsically valuable work and an age-supportive climate, *The International Journal of Human Resource Management* 28(17): 2449-2472. <https://doi.org/10.1080/09585192.2015.1137607>

Volberda, H. W.; & Karali, E. 2015. Reframing the compositional capability: a resource-based view on 'a composition-based view of firm growth. *Management and Organization Review* 11(3): 419-426. <http://dx.doi.org/10.1017/mor.2015.39>

Wang, S.; & Noe, R.A. 2010. Knowledge sharing: A review and directions for future research. *Human Resource Management Review* 20: 115–131. <https://doi.org/10.1016/j.hrmr.2009.10.001>

West M.A.; Tjosvold D.; & Smith K.G. (eds.) 2003. International handbook of organizational teamwork and cooperative working, Chichester, John Wiley & Sons.

Wijethilake, C.; & Ekanayake, A. 2018. Proactive Strategic Responses to Corporate Sustainability Pressures: A Sustainability Control System Framework. In *Advances in Management Accounting*, Malina, M. Ed., Emerald Publishing Limited, 30: 129-173. <https://doi.org/10.1108/S1474-78712018000030006>

Won D.; & Chelladurai, P. 2016. Competitive Advantage in Intercollegiate Athletics: Role of Intangible Resources, *PLoS ONE* 11(1): e0145782. <https://doi.org/10.1371/journal.pone.0145782>

Worlu, R.; Osibanjo, A.; Ogunnaike, O.; Salau, O.; & Igbino, E. 2016. Employee Relations Strategy: Implication for Performance in Lagos State University, South-West, Nigeria, *The Journal of Human and Work* 3(1): 53-63. <http://dx.doi.org/10.2139/ssrn.2786361>

Wright, P. M.; Dunford, B. B.; & Snell, S. A. 2001. Human resources and the resource based view of the firm, *Journal of Management*, 27(6): 701-721, <https://doi.org/10.1177/014920630102700607>

Ying, Q.; Hassan, H.; & Ahmad, H. 2019. The Role of a Manager's Intangible Capabilities in Resource Acquisition and Sustainable Competitive Performance. *Sustainability* 11(2): 527. <https://doi.org/10.3390/su11020527>

Zanda S. 2018. The Compatibility of Effectiveness and Efficiency: The Pillars of Barnard's Theory of Cooperation In: Building Efficient Management and Leadership Practices, Innovation, Technology, and Knowledge Management, Springer, Cham, 109- 128, https://doi.org/10.1007/978-3-319-60068-0_8

Zheng X.; Li L., Zhang F.; & Zhu, M. 2019. The Roles of Power Distance Orientation and Perceived Insider Status in the Subordinates' Moqi with Supervisors and Sustainable Knowledge-Sharing, *Sustainability* 11: 1421. <https://doi.org/10.3390/su11051421>

Helena BULIŃSKA-STANGRECKA is an assistant professor at Faculty of Administration and Social Sciences at Warsaw University of Technology. Her research focuses on the human resource management; knowledge management; trust and organizational culture.
ORCID ID: orcid.org/0000-0003-2971-9708

Anna BAGIEŃSKA is an Assistant Professor at Faculty of Engineering Management at Bialystok University of Technology in Poland. Her research interests include human resource management, corporate social responsibility and integrated reporting
ORCID ID: orcid.org/0000-0002-3053-8085

Make your research more visible, join the Twitter account of ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES:
[@Entrepr69728810](https://twitter.com/Entrepr69728810)

Copyright © 2020 by author(s) and VsI Entrepreneurship and Sustainability Center
This work is licensed under the Creative Commons Attribution International License (CC BY).
<http://creativecommons.org/licenses/by/4.0/>

