

# Examination of Sustainable Human Resource Management on Employee Performance Indicators

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## 1 ABSTRACT

In recent years, the topic of sustainable human resource management (SHRM) has become increasingly important (Piwowar-Sulej, 2021). The benefits of SHRM are becoming increasingly apparent, particularly in light of the shortage of skilled workers and the demographic change as SHRM is expected to enhance commitment (Ehnert, Parsa, Roper, Wagner & Müller-Camen, 2016). Thus, retention management via SHRM is in the limelight instead of recruitment of employees. However, the integration of social, economical and environmental sustainability within human resource management (HRM) strategy is often lacking and thus an innovative aspect (Ehnert et al., 2016; Kramar, 2022; Piwowar-Sulej, 2021). Moreover, the benefits of SHRM and the impact on employee performance indicators have rarely been analyzed empirically (Peerzadah, Mufti & Nazir, 2018). Thus, this paper aims at closing this gap by answering the following research question: To what degree does SHRM increase or decrease employee performance indicators? This study contributes to the social dimension of sustainability and thus contributes to the current SHRM debate with the aim of gaining insights into the impact of SHRM practices on employee performance, which will be evaluated quantitatively in order to close the aforementioned gap. Thus, a conceptual framework based on existing literature, the transactional stress model (Lazarus & Folkman, 1984) as well as the Job Demands-Resources model by Bakker and Demerouti (2007) will be developed. The framework is used to evaluate the impact of SHRM on employee stress, employee engagement, employee turnover and affective commitment. It is anticipated that a deeper understanding will be gained regarding the relevance of SHRM in business environments.

Keywords: Employee Performance, Sustainable Human Resource Management, Stress, Sustainability, Commitment

## 2 INTRODUCTION

The topics sustainability and responsibility are of increasingly importance for German companies due to regulatory aspects but also due to employees asking for more sustainability (Doyé, 2016). Dealing responsibly with social, economical and ecological challenges in particular is an important component of competitiveness for companies (Doyé, 2016). In this context, employees are considered to be responsible for day-to-day business processes, as their knowledge and skills form the basis for sustainable corporate management and help to shape the corporate culture (Doyé, 2016.). The long-term retention of employees is becoming increasingly important in order for companies to successfully tackle challenges such as the shortage of skilled workers, demographic change and the decline in highly qualified employees (Kraft & Drossel, 2019).

For this reason, new human resource management (HRM) concepts have emerged in recent years, particularly with regard to sustainability (Piwowar-Sulej, 2021), like sustainable human resource management (SHRM). It is based on the original definition of sustainability, which was mentioned in the year 1713 in forestry by Carl von Carlowitz first and was subsequently shaped by the Brundtland Commission in the year 1987 in the report *Our Common Future*. This new HRM concept aims at ensuring employees to achieve positive financial, social, sustainable and environmental outcomes within the organization in the short and long term (Ehnert et al., 2016; Kramar, 2022; Piwowar-Sulej, 2021). According to Kramar (2022) as well as Cohen, Taylor and Müller-Camen (2012), SHRM is of paramount importance when including sustainability as a central part of HRM strategy as well as the operational implementation in businesses.

Even though SHRM has been able to generate more attention in recent years, the research stream of SHRM is still developing (Anlesinya & Susomrith, 2020). There are several knowledge gaps in the areas of

economical and social SHRM, as the primary focus – so far – is on the ecological part of SHRM. In addition, the influences of SHRM have largely been investigated from a management perspective (Anlesinya & Susomrith, 2020; Kramar, 2022). However, the perspective of employees is still lacking in SHRM research. Thus, there is a need for increased research in the field of SHRM (Anlesinya & Susomrith, 2020; Kramar, 2022; Qamaret, Afshan & Rana, 2023). According to Kramar (2022), models for the implementation of SHRM have to be expanded regarding the benefits of sustainability and to create guidelines for the operationalization of SHRM. For this reason, this paper aims at analyzing the nexus of SHRM and employee performance indicators for closing the gap by focusing on the social perspective of sustainability in order to answer the following research question: To what degree does SHRM increase or decrease employee performance indicators? Thus, this study will contribute to knowledge in the field of SHRM by (1) developing a conceptual framework on SHRM and its effects on employee performance indicators and (2) by measuring, analyzing and evaluating the anticipated effects, i.e., the impact of SHRM on employee performance indicators based on a self-developed SHRM model.

### 3 LITERATURE REVIEW

Clarifying the terminologies used in this paper and distinguishing between related concepts are essential for understanding the conceptual framework. In the following section, various perspectives from existing research are presented, which were analyzed during a narrative literature review. Building on this, the conceptual framework is developed, serving as the basis for answering the research question initially proposed.

#### 3.1 Sustainable Human Resource Management

The economic efficiency and effectiveness of personnel management, traditionally regarded as success, emphasizes the efficient deployment and utilization of personnel (Ehnert, 2008; Ehnert et al., 2016). This is possible if sufficient high-quality human resources are available (Ehnert, 2008.). If this is not the case, sustainable human resource management strategies and practices must be employed additionally (Ehnert, 2008.). These include issues such as improving the work-life balance of employees, health care, regeneration of employees, or the preservation of social legitimacy (Ehnert, 2008; Ehnert et al., 2016). It expands the economic goals to include the social perspective, i.e., social responsibility (Kramar, 2022). SHRM defines its core mission as the management of people to support the United Nations (UN) Sustainable Development Goals (SDGs) and SHRM achieves comprehensive organizational goals on the social, economical as well as ecological perspective (Cohen et al., 2012). The implementation of SHRM positively influences the UN SDGs and promises economic success (Kramar, 2022). It is beneficial for companies, has a positive impact on employees' health and reduces absenteeism (Ehnert, 2008; Ehnert et al., 2016). SHRM follows the concept of the Triple Bottom Line (TBL) – Planet, People, Profit (Elkington, 1997) – and includes environmental, social and financial dimensions, contributing to environmental quality, social justice, and the financial performance of the organization (Cohen et al. 2012). SHRM includes traditional HRM tasks as well as more modern tasks such as image building, developing environmental awareness and gaining a competitive advantage (Merlin & Chen, 2022).

#### 3.2 Performance Indicators

To operationalize employee performance, it is important to identify and evaluate validated scales on the individual level. Therefore, in the current study, validated Likert scales were used to measure and analyze the impact of SHRM on employees. The selection of the performance indicators was based on the individual indicators of the Job Demands-Resources model by (Bakker & Demerouti, 2007) and includes the following employee performance indicators: stress, employee engagement, employee turnover, and affective commitment. The scales used to measure SHRM and the employee performance indicators have been developed by Felfe, Six, Schmook and Knorz (2002), Shafaei (2020), Klein, Brähler, Dreier, Reinecke, Müller, Schmutzer, Wölfling and Beutel (2016); Roodt (2004) as well as Schaufeli and Bakker (2004). Employee performance plays an important role in contributing to organizational goals. It describes a scalable action, outcome and behavior which is linked to accomplishing and meeting work-related goals as well as fulfilling expectations (Atatsi, Stoffers & Kil, 2019; Campbell & Wiernik, 2015). To conceptualize employee performance, it is important to distinguish performance into action, e.g., behavior, and outcome, e.g., result, of performance (McCloy, Campbell & Cudeck, 1994). The behavior-related aspect refers to what a person

does in a certain situation at work, whereas the outcome-aspect of performance depends on factors other than the individual's behavior but focus on the generated result(s) (Sonntag & Frese, 2005).

### 3.3 Job Demands-Resources Model

The Job Demands-Resources model (JD-R) predicts work factors influencing employee well-being, motivation as well as organizational outcomes (Bakker & Demerouti, 2007). Originally developed to identify the causes of burnout, it also predicts employee engagement, job performance, conflict and organizational consequences (Lesener, Gusy & Wolter, 2019). It distinguishes between job demands and resources, with demands having a positive effect on strain, while resources have a positive effect on motivation as well as on the nexus between job demands and strain, e.g., stress and well-being (Bakker & Demerouti, 2007). Job resources are, for example, social support, autonomy and feedback, while demands are for instance on a mental, physical or emotional dimension (Bakker & Demerouti, 2007).

The JD-R model provides two main psychological relationships for work motivation and stress (Bakker & Demerouti, 2007). One relationship concerns the nexus between demands and stress, while the other considers the role of resources in improving work motivation and reducing the strength of the relationship between job demands and strain, like cynicism as well as stress (Bakker & Demerouti, 2011; van Beurden, van De Voorde & van Veldhoven, 2020). However, high levels of stress can affect organizational outcomes (Ryan & Deci, 2000; Schaper, 2014). Resources can satisfy psychological needs, such as affiliation to others or a community, the pursuit of autonomy and competence, then they possess motivating effects (Ryan & Deci, 2000; Schaper, 2014). These characteristics are present in the SHRM concept (Ehnert et al., 2016). SHRM is thus understood as a job resource as it includes employee involvement, recruiting, rewarding, training and achieving social responsibility as well as gaining a competitive advantage (Merlin & Chen, 2022).

### 3.4 Transactional Stress Model

The transactional stress model by Lazarus and Folkman (1984) is a cognitive model that considers the cognitive and emotional evaluation of stress situations as well as available coping mechanisms (Richter & Hacker, 1998). Lazarus emphasizes the influence of the demands of a situation on an individual's stress response (Lazarus & Alfert, 1964). In the model, a person's stress response depends on their subjective assessment of stressors, while the assessment process is divided into the primary, secondary, and reappraisal stage (Lazarus & Folkman, 1984). Depending on the individual assessment, a situation may be perceived as a threat.

Referring to (Lazarus & Folkman, 1984), the primary appraisal categorizes the situation into irrelevant, friendly/positive, or strenuous/distressing situations. In the secondary appraisal, it is examined whether existing resources and coping strategies are sufficient for handling the situation. If not, stress occurs. In the reappraisal, the person decides whether adjustments are necessary (Lazarus & Folkman, 1984). Stress occurs when a person, based on the assessment, fears being unable to meet the demands of a situation. The model is well-suited as a basis for prevention measures and provides insights into the causes of long-term stress effects (Schaper, 2014).

## 4 DEVELOPMENT OF A CONCEPTUAL FRAMEWORK

The study explains the relationships between SHRM and various employee performance indicators by combining existing theory, i.e., JD-R and transactional stress model, and an extensive narrative literature review. The JD-R assumes that job resources, e.g., social support, autonomy, and feedback, are associated to employee motivation that can lead to higher outcomes, while the relationship between job demands and stress declines (Ababneh, 2021; Bakker & Demerouti, 2011; Opatha, 2016; van Beurden et al., 2020). As aforementioned, these characteristics of job resources are also included in the concept of SHRM. Therefore, the findings of the JD-R can be applied to SHRM, which classifies SHRM as a job resource.

SHRM supports employee growth, learning and development, assists management and reduces absenteeism, health problems and associated company costs regarding the employees (Ehnert, 2008; Ehnert et al., 2016; Sonntag & Frese, 2003). Hahn and Dormann (2013) reinforce that employee engagement is related to job performance and is influenced by job resources. Peerzadah et al. (2018) agree with this finding and expand upon it with the insight that SHRM leads to an improved work life and reduced turnover. The combination of

the findings suggest that employee engagement mediates the relationship between SHRM and employee turnover (Hahn & Dormann, 2013; Peerzadah et al., 2018). Furthermore, SHRM has positive effects on employee health, which can reduce the negative consequences of stress, such as increased absenteeism and health problems (Sonnetag & Frese, 2003). Thus, the following hypotheses are proposed:

H1: SHRM is negatively related to stress.

H2: SHRM is positively related to employee engagement.

H10: Employee engagement negatively mediates the relationship between SHRM and employee turnover.

According to the transactional stress model by Lazarus and Folkman (1984) the perception and management of stress situations vary individually, leading to different reactions – positive, negative, or irrelevant. This paper refers to stress in a negative way from the individual perspective which in the long-run also negatively affect organizational performance (Tirrel, Kaufmann & Winnen, 2021). The World Health Organization confirms that perceiving a situation as stressful can impair the ability to process or complete tasks (World Health Organization, 2023). Ryan and Deci (2000) state that high levels of stress can negatively impact the pursuit and achievement of goals, which reduces outcome-oriented motivation. Bakker, Demerouti and Sanz-Vergel (2014) point out that stress negatively affects employee engagement, as engagement is understood as vigor and dedication. Hahn and Dormann (2013) emphasize that reducing stress is crucial for employees' performance and well-being. Furthermore, prolonged high stress can lead to burnout (Bakker et al., 2014). The following hypothesis is thus proposed:

H3: Stress is negatively related to employee engagement.

A study by Gilboa, Shirom, Fried and Cooper (2008) uncovered that job satisfaction is negatively affected by stress. This might be the case because employees are feeling stress as a negative aspect which they probably can not control, i.e., make their own choice on how to deal with it according to the transactional stress model (Lazarus & Folkman, 1984; Sonnetag & Frese, 2003). However, a decrease in job satisfaction can lead to increased employee turnover (Bakker & Bal, 2010; Kramar, 2022; Tirrel and Winnen, 2017). To reduce turnover rates, it is suggested to organize employee training, promote employee well-being, reduce stress, and achieve competitive advantages (Kramar, 2022). Sonnetag and Frese (2003) uncovered that stress negatively affects employee commitment and positively affects employee turnover. Bakker and Bal (2010) discovered that employees experience the highest engagement in challenging and resource-rich work environments. This can lead to increased emotional commitment of employees to the employer, known as affective commitment (Allen & Meyer, 1990). Kanning (2017) emphasizes that the likelihood of employees staying with a company increases when job satisfaction, social identification, and commitment are strongly pronounced. Therefore, the following hypotheses are derived:

H4: Stress is positively related to employee turnover.

H5: Stress is negatively related to affective commitment.

Kahn (1990) explains that engaged employees express themselves physically, cognitively, and emotionally in their work and identify strongly with it. Employee engagement is defined as a positive, work-focused psychological condition that binds employees to their workplace (Schaufeli, Salanova, González-Romá & Bakker, 2002; Takawira, Coetzee & Schreuder, 2014). Promoting resources and reducing stress are crucial for employee performance and well-being (Hahn & Dormann, 2013). Employee training and promoting well-being can reduce turnover (Kramar, 2022; Ruso, Glogovac, Filipović & Jeremić, 2021). Bakker et al. (2014) describe employee engagement as a positive motivational condition in the JD-R model. Job satisfaction and motivation are key factors for affective commitment (Westphal & Gmür, 2009), which arises when employees feel an emotional connection to their employer (Allen & Meyer, 1990). Van Dick and Ullrich (2004) expand this approach by including the great personal significance of the organization for the employee, which leads employees to be grateful to belong to it in the future as well. Higher job satisfaction, social identification, and commitment increase the likelihood that employees will stay within the company (Kanning, 2017; Westphal & Gmür, 2009). Practices to increase well-being and affective commitment can reduce employee turnover (Bowling, Khazon, Meyer & Burrus, 2015; Kanning, 2017; Kramar, 2022; Meyer, Paunonen, Gellatly & Goffin, 1989; Westphal & Gmür, 2009). Caldwell, Chatman and O'Reilly (1990) as well as Süß (2006) confirm the positive relationship between motivation and affective commitment. Allen and Meyer (1990) state that high affective commitment is associated with high engagement, high job

performance, low turnover, and high well-being. The aforementioned findings of Bakker et al. (2014), Bowling et al. (2015), Kanning (2017), Kramar (2022), Meyer et al. (1989) as well as Westphal and Gmür (2009) suggest that affective commitment has a negative mediating impact on the relationship of employee engagement towards employee turnover. Based on the findings, the following hypotheses are proposed:

H6: Employee engagement is negatively related to employee turnover.

H7: Employee engagement is positively related to affective commitment.

H9: Affective commitment negatively mediates the relationship between employee engagement and employee turnover.

According to Felfe (2008), employees are more committed to the goals and interests of the company when they feel a connection to the organization. He also states that they are more willing to accept changes and new developments while remaining loyal to the company, even when attractive job opportunities arise elsewhere. Three phenomena play a crucial role in ensuring a positive bond between employees and the company: job satisfaction, social identification, and commitment (Kanning, 2017). The stronger the job satisfaction, social identification, and commitment, the more likely it is that employees will stay with the company (Kanning, 2017; Westphal & Gmür, 2009). According to Allen and Meyer (1990), a high positive level of affective commitment is associated with low turnover, low absenteeism, and high well-being. Conversely, this suggests that a high level of stress can reduce affective commitment. These findings lead to the following hypothesis:

H8: Affective commitment is negatively related to employee turnover.

Based on the aforementioned theories and on the findings from the narrative literature review, the hypotheses were derived. This leads to the following synthesized conceptual framework (figure 1), which constitutes our first contribution to knowledge. This conceptual framework has a comparable structure to the JD-R, underlining the strong theoretical foundation.

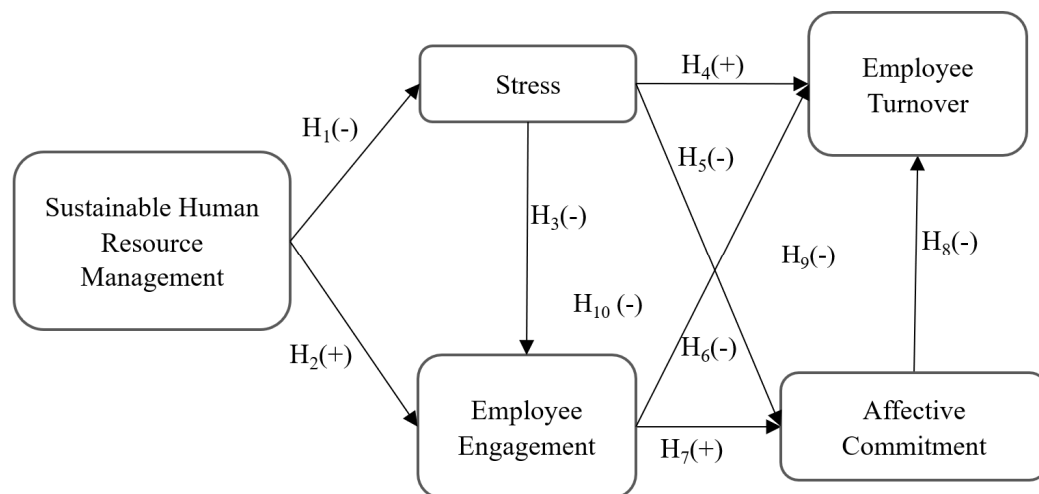


Figure 1: Conceptual Framework of SHRM on employee performance indicators, own depiction.

## 5 METHODOLOGY

In order to analyze the data, the usage of partial least squares structural equation modeling (PLS-SEM) is intended. This procedure has been used in several business research projects and enables researchers to make predictions (Hair, Hult, Ringle & Sarstedt, 2022; Sarstedt, 2019). Moreover, complex models including latent variables can be evaluated (Ringle, Wende & Becker, 2022), which represents the limelight of our study. Prior to data analysis, the minimum sample size will be calculated by using G\*Power analysis (error probability .05; power .8) (Faul, Erdfelder, Buchner & Lang, 2009). This procedure defines a minimum sample size based on the conceptual framework. In order to achieve the minimum sample size, an online questionnaire will be distributed virtually, especially via social media, so a cluster and snowball sampling will be applied (Miles, Huberman & Saldaña, 2014; Teddlie & Tashakkori, 2009). Therefore, five-point Likert scales including a cannot answer option will be used. For analyzing the generated data, SmartPLS software version 4.0.9.8 (Ringle et al., 2022) will be used since SmartPLS is “the most comprehensive software” (Henseler, 2017, p. 373).



For generating high quality and reliable results, the analytical procedure, as recommended by Hair et al. (2022), will be followed. Thus, first the measurement model will be evaluated before second, the structural model assessment follows. This also includes the analysis of significance and relevance of the a priori developed hypotheses referring to the conceptual framework. Additionally, in order to assess the common method bias, Harman's single factor test is about to be applied (Podsakoff et al., 2003). Since generated data will be handled confidentially as well as anonymously, it is not expected to be biased (Chatterjee, Chaudhuri, Thrassou and Vrontis, 2022). However, SPSS version 29.0 will be used to evaluate whether the data is biased by using the Harman's single factor test (Chatterjee et al., 2022; Podsakoff et al., 2003). The findings of the analysis will finally be presented in April at the REAL CORP Conference 2024 in Mannheim.

## 6 EXPECTED RESULTS

The expected results are now listed on the basis of the developed hypotheses. The focus is on the associations between SHRM and employee performance indicators.

According to the JD-R model, job resources potentially motivate employees, enhancing employee engagement and reducing stress (Bakker & Demerouti, 2011; Van Beurden et al., 2020). SHRM, as defined above, acts as a significant job resource, contributing to employee growth, learning, and development, and reducing absenteeism and health issues among employees, which subsequently lowers organizational costs (Ehnert, 2008; Sonnentag & Frese, 2003). However, especially stress is an individual feeling which has to be decided on individually as proposed by Lazarus and Folkman (1984).

Thus, we expect SHRM to positively impact employee performance indicators in terms of lower stress (H1) and higher engagement (H2), based on the theoretical foundation of the JD-R. Moreover, it is expected that employee engagement negatively mediates the relationship between SHRM and employee turnover (H10).

In addition, stress is expected to reduce employee engagement (H3) as well as affective commitment (H5) while enhancing employee turnover (H4), referring to expected individual choices made according to the transactional stress model.

Furthermore, employee engagement is expected to be associated negatively with employee turnover (H6), again based on an individual decision made according to the transactional stress model by understanding stress in a negative manner. However, employee engagement is also expected to be positively related to affective commitment (H6), which is expected to be negatively associated with employee turnover (H8) since employees with strong emotional ties tend to stay longer with a company (Kanning, 2017).

Finally, affective commitment is expected to negatively mediate the nexus between employee engagement and turnover (H6) since a strong emotional bond might buffer the effects of engagement on turnover (Westphal & Gmür, 2009).

Therefore, after our initial conceptualization and presentation of the research design, the final results will be presented at the REAL CORP Conference in April 2024 in Mannheim. SHRM is of great importance for the society, also in smart cities, since in this case human resources are used carefully instead of overusing them which binds employees to the company in the long term. Moreover, training employees is in the limelight of SHRM. So, if for instance smart city planners are not offered the necessary trainings (Kaufmann et al., 2021), they might leave a company as they do not have the feeling of being treated fairly. This is in contrast to the company's intentions of generating sustainable human capital by their employees (Kaufmann et al., 2021). Therefore, our expected results are beneficial for companies as they are informed about the effects of SHRM on certain employee performance indicators, which are of paramount importance for HRM departments since it is getting harder to recruit employees. Thus, retention management is increasingly important, which can probably benefit from SHRM. So, companies can decide on including or excluding SHRM in strategic HRM based on empirical findings generated via analyzing the self-developed synthesized conceptual framework.

## 7 REFERENCES

- Ababneh, O. M. (2021). Wie wirken sich grüne HRM-Praktiken auf das Mitarbeiter Nachhaltige Verhalten aus? Die Rolle des Mitarbeiterengagements und der Persönlichkeitsattribute. *Journal of Environmental Planning and Management*, 64(7), 1204-1226. doi:<https://doi.org/10.1080/09640568.2020.1814708>
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *British Psychological Society*, 63(1), 1-18. doi:<https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>

- Anlesinya, A., & Susomrith, P. (2020). Sustainable human resource management: a systematic review of a developing field. (E. P. Limited, ed.) *Journal of Global Responsibility*, 11(3), 295-324. doi:<https://doi.org/10.1108/JGR-04-2019-0038>
- Atatsi, E. A., Stoffers, J., & Kil, A. (2019). Factors affecting employee performance: a systematic literature review. *Journal of Advances in Management Research*, 16(3), 329-351. doi:<https://doi.org/10.1108/JAMR-06-2018-0052>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309-310. doi:<https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. *The British Psychological Society*, 83(1), 189-206. doi:<https://doi.org/10.1348/096317909X402596>
- Bakker, A. B., & Demerouti, E. (2011). The Job Demands-Resources model: Challenges for future research. *Journal of Industrial Psychology*, 37(2), 9.
- Bakker, A. B. et al. (2014). Burnout and Work Engagement: The JD-R Approach. *The Annual Review of Organizational Psychology and Organizational Behavior*(1), 389-411. doi: <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Bowling, N. A., Khazon, S., Meyer, R. D., & Burrus, C. J. (2015). Situational Strength as a Moderator of the Relationship Between Job Satisfaction and Job Performance: A Meta-Analytic eXAMINATION. *Journal of Business and Psychology*, 30, 89-104. doi:<https://doi.org/10.1007/s10869-013-9340-7>
- Caldwell, D. F., Chatman, J. A., & O'Reilly, C. A. (1990). Building organizational commitment: A multifirm study. *Journal of Occupational Psychology*, 63(3), 245-261. doi:<https://doi.org/10.1111/j.2044-8325.1990.tb00525.x>
- Chatterjee, S. et al. (2022), "Social network games (SNGs) addiction: Psychological dimensions and impacts on life quality and society", *Technological Forecasting and Social Change*, Vol. 177, pp. 121529.
- Cohen, E., Taylor, S., & Müller-Camen, M. (2012). HRM's role in Corporate Social and Environmental Sustainability, SHRM Foundation's Effective Practice Guidelines Series. Alexandria: SHRM Foundation. Retrieved on 06. 23 2023
- Doyé, T. (2016). CSR und Human Resources Management- Die Relevanz von CSR für modernes Personalmanagement. (R. Schmidpeter, ed.) Köln: Springer-Verlag Berlin Heidelberg.
- Ehnert, I. (2008). Strategien und Praktiken eines Nachhaltigen Human Resource Management. *uwf*(16), 187-192. Retrieved on 11.13 2023 from <https://link.springer.com/content/pdf/10.1007/s00550-008-0092-1.pdf>
- Ehnert, I. et al. (2016). Reporting on sustainability and HRM: a comparative study of sustainability reporting practices by the world's largest companies. *The International Journal of Human Resource Management*, 27(1), 88-108.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. London: John Wiley and Sons.
- Faul, F., Erdfelder, E., Buchner, A. & Lang, A.G. (2009), "Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses", *Behavior Research Methods*, Vol. 41, No. 4, pp. 1149-1160.
- Felfe, J. (2008). *Mitarbeiterbindung*. Hogrefe Verlag. retrieved on 07. 07 2023
- Felfe, J., Six, B., Schmook, R., & Knorz, C. (2002). Commitment Organisation, Beruf und Beschäftigungsform. *ZIS*, (eds.) doi:<https://doi.org/10.6102/zis9>
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel Psychology*, 61(2), 227-271. doi:<https://doi.org/10.1111/j.1744-6570.2008.00113.x>
- González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 3(1), 71-92. doi:<https://doi.org/10.1023/A:1015630930326>
- Hahn, V. C., & Dormann, C. (2013). Stress, Burnout and Arbeitsengagement. In R. Stock-Homburg (ed.), *Handbuch Strategisches Personalmanagement* (S. 553-575). Wiesbaden: Springer Gabler. doi:[https://doi.org/10.1007/978-3-658-00431-6\\_30](https://doi.org/10.1007/978-3-658-00431-6_30)
- Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (Vol. 3). United States of America: SAGE Publication, Inc. retrieved on 08. 12 2023.
- Hair, J. F., Hult, G. T., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *An Introduction to Structural Equation Modeling. In J. F. Jr., G. T. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, & S. Ray, Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R* (p. 1-29). Classroom Companion: Business. Springer.
- Henseler, J. (2017). Partial least squares path modeling. In *Advanced methods for modeling markets: International series in quantitative marketing* In: Leeflang, P., Bijmolt, T. & Pauwels, K. eds. *Advanced Methods for Modeling Markets*, Heidelberg: Springer, pp. 361-381.
- Henseler, J. et al. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. doi:<https://doi.org/10.1007/s11747-014-0403-8>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724. doi:<https://doi.org/10.2307/256287>
- Kanning, U. P. (2017). *Grundlagen der Mitarbeiterbindung*. In U. P. Kanning, *Personalmarketing, Employer Branding und Mitarbeiterbindung* (S. 191-216). Springer-Verlag Berlin Heidelberg. doi:[https://doi.org/10.1007/978-3-662-50375-1\\_13](https://doi.org/10.1007/978-3-662-50375-1_13)
- Kaufmann, H.R., Sanchez Bengoa, D., Tirrel, H., & Panni, M.F.A.K. (2021). Competences of smart city planners: The alpha and omega. In: Schrenk, M., Popovich, V.V., Zeile, P., Elisei, P., Beyer, C., Ryser, J. and Stöglehner, G. eds. *Proceedings of the 26th International Conference on Urban Planning, Regional Development and Information Society. REAL CORP 2021: Cities 20.50 Creating Habitants for the 3rd millennium smart – sustainable – climate neutral*, Vienna: CORP – Competence of Urban and Regional Planning, pp. 1137-1147.
- Klein, E. M., Brähler, E., Dreier, M., Reinecke, L., Müller, K. W., Schmutzer, G., Wölfling, K., & Beutel, M. E. (2016). The German version of the Perceived Stress Scale – psychometric characteristics in a representative German community sample. *BMC Psychiatry*, 16(159). doi:<https://doi.org/10.1186/s12888-016-0875-9>
- Kraft, S., & Drossel, M. (2019). Welche Auswirkungen hat der Fachkräftemangel? *Pflege Wissenschaft*(72), 58-59. doi:<https://doi.org/10.1007/s41906-019-0059-6>
- Kramar, R. (2022). sustainable Human Resource Management: six defining characteristics. *Asia Pacific Journal of Human Resources* (60), 146-170.
- Lazarus, R. S., & Alfert, E. (1964). The short-circuiting of threat by experimentally altering cognitive appraisal. *Journal of Abnormal and Social Psychology*, 69(2), 195-205. doi:<https://doi.org/10.1037/h0044635>

- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer Publishing Company, Inc.
- Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, 33(1), 76-103. doi: <https://doi.org/10.1080/02678373.2018.1529065>
- Meyer, J. P., Paunonen, S. V., Gellatly, I. R., Goffin, R. D., & Jackson, D. N. (1989). Organizational Commitment and Job Performance: It's the Nature of the Commitment That Counts. *Journal of Applied Psychology*, 74(1), 152-156. doi: <https://doi.org/10.1037/0021-9010.74.1.152>
- Merlin, M. L., & Chen, Y. (2022). Impact of green human resource management on organizational reputation and attractiveness: The mediated-moderated model. *Frontiers in Environmental Science*, 10, 1-16. doi: <https://doi.org/10.3389/fenvs.2022.962531>
- Miles, M.B., Huberman, A.M. & Saldaña, J. (2014). *Qualitative data analysis. A methods sourcebook*, third edition, Thousand Oaks: Sage Publications.
- Opatha, H. (2016). Towards a Sustainable Future: Reflections. *Sri Lankan Journal of Human Resource Management*, 1, S. 5-7. doi: <https://doi.org/10.4038/sljhrm.v6i1.5629>
- Peerzadah, S. A., Mufti, D. S., & Nazir, D. N. (2018). Green Human Resource Management: A Review. *International Journal of Enhanced Research in Management & Computer Applications*, 7(3), 790-795.
- Piowar-Sulej, K. (2021). Core functions of Sustainable Human Resource Management. A hybrid literature review with the use of H-Classes methodology. *Sustainable Development*, 29(4), 671-693. doi: <https://doi.org/10.1002/sd.2166>
- Podsakoff, P.M., MacKenzie, S.B., Jeong-Yeon Lee, & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Qamar, F., Afshan, G., & Rana, S. A. (2023). Sustainable HRM and well being: systematic review and future research agenda. (Springer, ed.) *Management Review Quarterly*, 1-51. doi: <https://doi.org/10.1007/s11301-023-00360-6>
- Richter, P., & Hacker, W. (1998). *Belastung und Beanspruchung: Stress, Ermüdung und Burnout im Arbeitsleben*. München: Asanger.
- Ringle, C. M., Wende, S., & Becker, J. M. (2022). SmartPLS 4. Retrieved July 15, 2023, from SmartPLS: <https://www.smartpls.com>
- Roodt, G. (2004). Turnover Intention Scale (TIS). Johannesburg: University of Johannesburg, retrieved on 08. 25 2023 from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=5086&context=dissertations>
- Ruso, J., Glogovac, M., Filipović, J., & Jeremić, V. (2021). Employee Fluctuation in Quality Management Profession: Exploiting Social Professional Network Data. *Taylor & Francis*, 34(4), 511-525. doi: <https://doi.org/10.1080/10429247.2021.1952022>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* Articles, 1, 68-78. doi: <https://doi.org/10.1037/0003-066X.55.1.68>
- Sarstedt, M. (2019). Der knacks and a silver bullet. In: Babin, B.J. & Sarstedt, M. eds. *The great facilitator. Reflections on the contributions of Joseph F. Hair, Jr. to marketing and business research*, Heidelberg: Springer, pp. 155-164.
- Schaper, N. (2014). Wirkungen der Arbeit. In G. B. F. W. Nerdinger (ed.), *Arbeits- und Organisationspsychologie* (3 ed., S. 517-540). Berlin: Springer. doi: [https://doi.org/10.1007/978-3-642-41130-4\\_28](https://doi.org/10.1007/978-3-642-41130-4_28)
- 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: An Interdisciplinary Forum on Subjective Well-Being*, 3(1), 71-92. doi: <https://doi.org/10.1023/A:1015630930326>
- Schaufeli, W., & Bakker, A. (2004). Work Engagement Scale. Occupational Health Psychology Unit. retrieved on 08. 25 2023 from [https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test\\_manual\\_UWES\\_English.pdf](https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf)
- Secretary-General, U., & World Commission, o. E. (1987). Report of the World Commission on Environment and Development: "Our common future". New York. retrieved on 01.31 2024 from <https://digitallibrary.un.org/record/139811>
- Shafaei, A., Nejati, M., & Yusoff, Y. M. (2020). Green human resource management: A two-study investigation of antecedents and outcomes. *International Journal of Manpower*, 41(7). doi: <https://doi.org/10.1108/IJM-08-2019-0406>
- Sonnentag, S., & Frese, M. (2003). Stress in Organizations. In W. Borman, D. Ilgen, & R. Klimoski (ed.), *Handbook of Psychology: Industrial and Organizational Psychology* (S. 453-491). Hoboken: John Wiley & Sons Inc. doi: <https://doi.org/10.1002/9781118133880.hop212021>
- Süß, S. (2006). Commitment freier Mitarbeiter: Erscheinungsformen und Einflussmöglichkeiten am Beispiel von IT-Freelancern. *German Journal of Research in Human Resource Management*, 3, 255-275.
- Takawira, N., Coetzee, M., & Schreuder, D. (2014). Job embeddedness, work engagement and turnover intention of staff in a higher education institution: An exploratory study. *SA Journal of Human Resource Management*, 12(1), 1-10. doi: <https://dx.doi.org/10.4102/sajhrm.v12i1.524>
- Teddlie, C. & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*, Thousand Oaks: Sage Publications.
- Tirrel, H., Kaufmann, H.R., & Winnen, L. (2021). Why not to work in flexible workplaces? A systematic literature review and development of a conceptual framework for SMEs. *International Review of Entrepreneurship*, 19(4), 555-584.
- Tirrel, H., & Winnen, L. (2017). Increasing mobility of employment relationships and its consequences for performance and motivation. In Sucky, E., Kolke, R., Biethahn, N., & Werner, J. (Eds.), *Mobility in a Globalised World 2017* (pp. 138-155). Bamberg: University of Bamberg Press.
- van Beurden, J., van De Voorde, K., & van Veldhoven, M. (2020). The employee perspective on HR practices: A systematic literature review, integration and outlook. *Taylor and Francis*, 32(2), 359-393. doi: <https://doi.org/10.1080/09585192.2020.1759671>
- van Dick, R., & Ullrich, J. (2004). Commitment und Identifikation mit Organisationen. Göttingen: Hogrefe.
- von Carlowitz, H. C. (1713). *SYLVICVLTVRA OECONOMICA Oder Haußwirthliche Nachricht und Naturmäßige Anweisung Zur Wilden Baum-Zucht* (Vol. 135). Leipzig: Johann Friedrich Braun.
- Westphal, A., & Gmür, M. (2009). Organisationsaltes Commitment und seine Einflussfaktoren: Eine Qualitative Metaanalyse. *Journal für Betriebswirtschaft*, 59(4), 201-229. doi: <https://doi.org/10.1007/s11301-009-0054-x>
- World Health Organization. (2023). World Health Organization. retrieved on 06.29 2023 from <https://www.who.int/news-room/questions-and-answers/item/stress>