

VILNIUS UNIVERSITY
FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

HUMAN RESOURCES MANAGEMENT

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MASTER'S THESIS

ŽMOGIŠKŲJŲ IŠTEKLIŲ VYSTYMO PRAKTIKŲ POVEIKIS DARBUOTOJŲ GEROVEI, MODERUOJANT SKAITMENINĖS LYDERYSTĖS KOMPETENCIJOMS IR MEDIJUOJANT NUOTOLINIO DARBO SĄLYGOMS	THE IMPACT OF HUMAN RESOURCE DEVELOPMENT PRACTICES ON EMPLOYEE WELLBEING WITH DIGITAL LEADERSHIP COMPETENCIES AS THE MODERATOR AND REMOTE WORK CONDITIONS AS THE MEDIATOR
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VILNIUS, 2025

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TERMINOLOGY

Remote Work - work relationships that are distributed through space and time, have an overall short duration, have minimal interpersonal contacts and mainly use digital communication (Tworoger, L. C., et al., 2013).

Organisational Wellbeing - the emotions and senses stemming from the extrinsic and intrinsic value of work (Butvilas, T., et al., 2023).

Digital Leadership Competencies - a combination of digital transformation and digital skills with one of the requirements being adaptability to change (Mollah, Md. A., et al., 2024).

Human Resource Development – is defined through three main areas – training and development (classroom training and coaching), career development (preparation of employees for future jobs and upcoming responsibilities) and organizational development (addressing issues related to organizational structure and potential changes) (as cited by Werner, J. M., 2014).

INTRODUCTION

Relevance of the topic. In line with numerous organisations shifting to remote or hybrid work model variations in recent years, especially following the COVID-19 pandemic, there has been a resurgence of research papers on the topics of remote work. With the shift to remote work having tracked negative impact on mental health (Gifford, J., 2022) the topic is especially relevant in relation to perceived wellbeing. In fact, recent studies have identified a gap in research when it comes to the relationship between wellbeing and on-site versus remote working conditions (Grybauskas, A., & Cárdenas-Rubio, J., 2024). However, most research had been conducted in the context of the pandemic, where the remote work was enforced and had unique implications on employee wellbeing (Singh, P., et al., 2022), thus there is room for further research in the context of employees choosing to work remotely over on-site and the role of managers as well as HR in that relationship. The topic of unequal access to hybrid and remote work has also increased in recent years with at least two days from home becoming the most popular desired structure across the workforce (Gifford, J., 2022).

Previous research has also identified that the level of managerial support has an impact on the reduced perceived wellbeing from the employee perspective (Lyzwinski, L. N., 2024). The managerial role is also perceived to be vital in fostering effective remote work (Delany as cited by Gifford, J., 2022). It is important to add that the need to regularly re-evaluate the leadership in the everchanging context of digital developments and remote work implications has been previously highlighted as well (Petitta, L., & Ghezzi, V., 2023). Thus, timely and frequent review of the implications of digital leadership on employee work conditions, wellbeing as well as development remain relevant. Researchers have also found that although it is evident that the impact of leadership on employee wellbeing in the remote environment perseveres, managers themselves are relatively unaware of the potential impact on the employees that they wield (Kukytė, A., 2023). Furthermore, with hybrid and remote work models being more widely adapted across the globe, understanding the attributes of such places and analysing the workforce and leadership to identify methods to supporting said workforce is essential for organizational success (Kukytė, A., 2023).

There has been an increased focus on wellbeing in the context of the workplace as well as in combination with remote working conditions. Wellbeing has been evaluated from various domains – psychological, social, medicinal and others and thus has now become a very broad, complex and multi-dimensional concept (Catană, Ș.-A., et al., 2022). Wellbeing has been identified as a key human

need and research has confirmed its importance on the organizational level and it has been found to have numerous benefits, such as better job performance, lower absenteeism and increased retention among others (Catană, Ş.-A., et al., 2022). Hence, it is a key concept to be monitored more closely from the perspective of the employer as well as the HR that is providing support to management. It is important to note, that in the context of remote work, wellbeing correlations are still quite understudied, and research notes on the benefits of observing wellbeing in larger groups as well as different geographical contexts, whilst also noting the importance of observing more factors that have an impact on wellbeing (Catană, Ş.-A., et al., 2022), which can include Human Resource Development, remote working conditions and digital leadership competencies, which this study will aim to focus on.

Admittedly, HR has a crucial role in supporting managers and employees, and the concept of HRD is especially relevant in this regard. Although Human Resource Development has been identified to have a significant role in facilitating employee wellbeing, especially in regards to the dimension of burnout (Rumbles, S., & Rees, G., 2013), there has been a gap in recent literature linking specifically Human Resource Development programmes and policies, out of the rest of HRM practices, in relation to positive wellbeing outcomes, especially in the context of digital organisations. Additionally, in regards to organisational digitalization and the emergence of various digital tools including active application of AI, Human Resource Development practices are in need to be re-evaluated in a broader scope in order to support employee wellbeing through relevant upskilling practices (McLean, G. N., & González Ortiz de Zárate, A., 2024). Furthermore, unsustainable, lacking in structure and clarity learning practices have been identified to have potential negative implications on employee wellbeing (Lemmetty, S., & Collin, K., 2020), however the topic is yet to be deconstructed in more detail in recent academic research.

It is important to note, that the unique features of new generations entering the workforce are yet to be observed in more thorough detail (Kukytė, A., 2023). Although there is previous research on the implications of remote or specifically, hybrid work structure, including the impact on wellbeing, there has been lack of focus on specifically employee perspective, rather than the managerial point of view (Hopkins, J., & Bardoel, A., 2023). Furthermore, there have not been many recent studies observing the impact on employee wellbeing in the remote working context that have taken into consideration the relationships of both Human Resource Development and Digital Leadership. Additionally, the concepts of HRD, Digital Leadership and Wellbeing are all quite new and thus are

regularly evolving in line with new generations joining the workforce, thus their impact on the employees must regularly be observed and re-evaluated to be able to identify best practices in supporting employees and their managers.

In the following study, the relationship between Human Resource Development, remote work conditions and employee wellbeing will be evaluated, whilst taking into account the moderating impact of digital leadership competencies on the relationships. Additionally, the impact of such demographical components as previous experience, age and gender will be observed as well. While analysing the scientific literature, many studies were found on the various impactors of employee wellbeing, the role of HRD and the importance of digital leadership competencies, as well as factors of remote working conditions and their effect on the workforce, proving the relevance of the topic.

The novelty of the Master thesis: Human Resource Development, Digital Leadership, Wellbeing and Remote Work Conditions are widely researched topics and have been especially focused on during and after the pandemic in recent academic research. However, the correlations between the concepts have yet to be further analysed. Furthermore, all of the forementioned phenomena, especially Human Resource Development (especially in the virtual context) as well as Digital Leadership are all fairly new and are still developing, thus further academic research is highly relevant to be conducted.

The problem of the Master thesis: What level of impact do Human Resource Development practices and remote work conditions have on employee wellbeing and what level of moderating impact do digital leadership competencies have on the relationship?

The aim of the Master thesis: To evaluate the relationship between Human Resource Development practices and employee wellbeing taking into account the moderating role of digital leadership competencies and the mediating role of remote work conditions.

The objectives of the Master thesis:

1. Based on scientific literature, examine theoretical aspects of remote work conditions, employee wellbeing, digital leadership competencies, Human Resource Development practices and the interlinkage between the concepts.
2. To create a conceptual framework of the relationship Human Resource Development practices and employee wellbeing with digital leadership competencies as the moderator and remote work conditions as the mediator.
3. Based on the conceptual model created by the author, conduct an empirical study and present the summarized results.

4. Based on the literature analysis and the conducted research, present conclusions and recommendations.

The methods deployed by the Master thesis:

1. The analysis of scientific literature and empirical research was used to explain the theoretical aspects of remote work, digital leadership competencies, employee wellbeing and Human Resource Development practices and the relationship between Human Resource Development practices and employee wellbeing with digital leadership competencies as the moderator and remote work conditions as the mediator.
2. A structured quantitative questionnaire was used to evaluate the relationship between Human Resource Development practices and employee wellbeing with digital leadership competencies as the moderator and remote work conditions as the mediator

The description of the structure of the Master thesis:

1. In the first part, the literature analysis is presented. This part of the paper provides information about the theoretical concepts of remote work, employee wellbeing, digital leadership competencies, Human Resource Development practices, remote work conditions and their impact on employee wellbeing with digital leadership competencies as the moderato and remote work conditions as the mediator.
2. The second part presents the research methodology. The goals, tasks, and hypotheses of the research are set, and the research model and process are presented.
3. The third part of the study presents the results of the quantitative research and describes the relationships found and other research insights that were assessed through the data analysis in addition to the limitations of the study.
4. The fourth part presents the conclusions obtained during the research conducted and also presents practical recommendations.

1. LITERATURE REVIEW ON REMOTE WORK, DIGITAL LEADERSHIP COMPETENCIES, HUMAN RESOURCE DEVELOPMENT PRACTICES, ORGANISATIONAL WELLBEING AND THE MODERATING EFFECT OF DIGITAL LEADERSHIP COMPETENCIES

1.1. Theoretical aspects of Remote Work

Model of work that incorporates ICT's is in recent research most often been referred to as telecommuting and is synonymous to distance-work, computer mediated work, distributed work or the more common term of remote work (Selivertova, Y., 2022). Remote work can be defined as work relationships that are distributed through space and time, have an overall short duration, have minimal interpersonal contacts and mainly use digital communication (Tworoger, L. C., et al., 2013). The term

of remote work has also been used synonymously to teleworking, work from home and online work and can in other words be described as a form of work that is conducted not in the regular office space (Nemțeanu, M.-S., & Dabija, D.-C., 2023). The term telecommuting was first used by Jack Nilles in 1975 and has also been found to be thereafter used synonymously with such terms as home-based work, virtual office, virtual work, e-work, flexiplace, flexible work and in relation to such work formats as part-time work, flexi-time, annualized hours, compressed workweeks and differentiated work hours (Raišienė, A. G., Rapuano, V., Dóry, T., & Varkulevičiūtė, K., 2021).

Telecommuting has been previously defined in thorough detail by Patricia Lyon Mokhtarian (1992). She outlines the criteria for telecommuting based on the structure of the term – tele (meaning distant) and commuting (referring to reduced or eliminated travel. Patricia Lyon Mokhtarian (1992) has proposed the definition for telecommuting as “working at home or at an alternate location and communicating with the usual place of work using electronic or other means, instead of physically travelling to a more distant work site”. In line with this she also proposes a definition for non-home based telecommuting – a telecommuting centre, which is defined as “a site, other than the home, from which the employee works instead of travelling to a more distant central work location”. Patricia Lyon Mokhtarian (1992) has broken down the term of telecommuting based on the various types of remote work:

- Conducting a home-based business.
- Moonlighting from home (referring to conducting a home-based business as a secondary job).
- Salaried employee working from home as overtime.
- Salaried employee working from home instead of the office.
- Working from a satellite office closer to home than the main office.
- Field work (conducted in other locations than the main office).
- Working whilst travelling.
- Managing a branch office.
- Long distance telecommuting.

The term telework has been previously categorized by Qvortrup (1998) depending on the contractual relationship (employee or contractual worker) and work locations (home, satellite office or a combination of home, office and field) into telecommuter, flexiworker and electronic homemaker. This categorization of the term has been later restructured by Peters, Tijdens and Wetzel's (2004) in correlation with the contractual relationship and work location into freelance teleworkers, home-based teleworkers (or supplementary teleworkers) and multisite teleworkers. This taxonomy of the concept has later been expanded into the following categories – fixed-site teleworker, mobile teleworker, flexiworker, freelance fixed-site teleworker, freelance mobile teleworker and freelance flexiworker (Garrett, R. K., & Danziger, J. N., 2007).

E-work previously has been defined similarly to remote work by the PRISM Centre as collaborative, computer reliant operations with enabled communications in broadly distributed

organizations of humans, robots and autonomous systems. E-work has thereof also previously been considered a part of telework (Nof, S. Y., 2003). The features and functions of the phenomena include e-operations, human-computer interactions (potentially human-robot interactions as well), collaboration, networking, e-learning and e-training (Nof, S. Y., 2003). E-work is also closely related to the concepts of e-business/e-enterprise and e-commerce (Nof, S. Y., 2003). The concept is strongly linked to theories on workflow, collaboration and interaction models, GRID computing, distributed information systems, knowledge-based systems, collaborative problem-solving, decision models and distributed control systems among others (Nof, S. Y., 2003). E-Work has been thereafter defined as work performed outside of the workplace with limited in-person interactions amongst colleagues as well as with management that are handled using digital tools (Ribeiro, J., da Silva, F. P., & Vieira, P. R., 2024).

Remote work has also been previously linked with the concept of digital nomadism (Cook, D., 2023). Remote working is a requirement for the forementioned concept, and it refers to remote work being enabled through digital technologies that therefore allowing to work and travel at the same time with flexibility over the frequency and location of where ones work is conducted (Cook, D., 2023). The said definition is influenced by the following variables – frequency of mobility, level of autonomy over mobility, domestic/international travel, legal possibilities/requirements, work-life balance level, usage of coworking spaces and work from home practices (Cook, D., 2023). In relations to this, the concept can be classified into 5 types – freelancers (employees who can control their employment format), business owners (employees who conduct complex businesses in collaboration with consultants or other types of employees/coworkers), salaried employees (referring to those who have a contract and receive a salary from a specific company that they are in a contractual relationship with), experimental (freelancer or business owner that is not yet generating money), armchair (employee aspiring to become a digital nomad in the upcoming years) (Cook, D., 2023).

With the term having various differentiations, studies have adapted the use of remote work specifically as it can be considered as an umbrella term that covers the main component of the concept being work being done at least partially from a location that is not the organizations offices and therefore reliant on the usage of digital tools to communicate, plan, coordinate tasks and interactions with other colleagues (Ribeiro, J., da Silva, F. P., & Vieira, P. R., 2024). The term of remote work can also be interlinked with the concept of virtual teams, which are defined by the unique characteristics of such employees (Seliverstova, Y., 2022). The main characteristics of said employees have been identified to be the pursuit towards a shared goal, geographical distribution and communication conducted using ICT tools with the communication being possible only using technological tools and the concept also incorporating cross-border collaboration (Seliverstova, Y., 2022).

It is important to note that there is a broad variety of remote working models, and this includes the more broadly familiar fully remote model, the hybrid model (specific structure of distribution of in-office and remote days), distributed (global teams) and asynchronous, focusing on task completion over set hours (Haque, Saw. Mu. S., 2023). The shift towards remote work has been evidently

expedited by the COVID-19 pandemic (Sokolic, 2022 as cited by Haque, Saw. Mu. S., 2023). However, the concept of remote work is still fairly recent with the first remote employee dating back to 1970 when NASA allowed a physicist to work on communication systems remotely and the first attempts to implement remote working on a broader scale tracing to 1979-1983 in IBM. With the invention of the internet, Wi-Fi and gradual development of such remote collaboration platforms as Slack, by 2018 70% of the world's population had adapted to varying levels of remote work (Toptal Research, 2023 as cited by Haque, Saw. Mu. S., 2023). COVID-19 having created unavoidable circumstances requiring prompt adaptation of the remote work model also had lowered cost for these processes (Bartik et al, 2020 as cited by Althoff, L., Eckert, F., Ganapati, S., & Walsh, C., 2022), which has encouraged companies to refrain from coming back to in-office work after the pandemic has ended. In the US, by May 2020, more than 50 percent of employees of high-density cities were working remotely. However, the remote working model is still a biased solution that is not possible to adapt to all industries and geographies (Althoff, L., Eckert, F., Ganapati, S., & Walsh, C., 2022).

Benefits of remote work include better work-life balance, reduction of in-office resource usage and improved level of sustainability in regards to daily commutes (Haque, Saw. Mu. S., 2023). Research has observed various other benefits of the shift towards remote working – not only for businesses and employees, but in a broader economic sense. Remote work allows for flexibility in housing selection from the employee perspective and a larger talent pool from the business perspective (Althoff, L., Eckert, F., Ganapati, S., & Walsh, C., 2022). Previous research has also highlighted other various benefits of remote working, which include open and transparent structures, improved information exchange and broader learning opportunities, higher levels of flexibility, autonomy and more efficiency in decision making (Seliverstova, Y., 2022).

Amongst other benefits previous research has been found to include reduction of unnecessary interactions and lessened number of distractions from the work environment perspective, such as ones occurring due to interactions with colleagues (Raišienė, A. G., et al., 2021). Additionally, employees have been found to consider social independence as a positive implication of remote work (Raišienė, A. G., et al., 2021). Social independence in this regard refers to the possibility to not follow requirements regarding formal appearance and regular work routines as well as possibility to avoid informal communications with coworkers and increased possibility to avoid communication selectively in general (Raišienė, A. G., et al., 2021).

Researchers have also identified other benefits of telework, such as (Morris, R. B., et al., 2023):

- Increased productivity – less stress associated to remote work results in innovation and higher efficiency as well as higher job satisfaction and improvement of self-rated performance scores.
- Employee satisfaction – higher level of perceived happiness and self-worth as well as higher morale.
- Cost savings – employees have been found to accept pay reductions to be able to work from home.
- Positive impact on environment – reduced emissions and traffic related pollution.

- Technological enablement – organisations are pushed to innovate and adapt to changing business needs that are providing them with long-term competitive advantages as well.

Some other benefits of e-work previously identified by researchers include (Nof, S. Y., 2003):

- Enhancement of communication.
- Improved work coordination.
- Accelerated sharing of knowledge and work distribution.
- Possibilities for customization.
- Reduction of communication costs.
- Reduction of work transaction costs.
- Faster task completion.
- Improved interactivity.

On the other hand, the remote working structure results in a variety of challenges for both management and HR and this includes more complicated monitoring of employee engagement, performance, having to deal with social isolation in the workforce and the challenging requirement of equipping employees with the relevant resources and communication tools (Haque, Saw. Mu. S., 2023). Some challenges that previous research has identified include the time gap among team members (for global teams), more complex team formation, complexities in relation to coordination and management and the lessened control over the progress of work (Seliverstova, Y., 2022). It is also important to note that work-life balance although is benefited for some, it can actually be a challenge for others (Seliverstova, Y., 2022). For global teams, which many remote teams are, the work model results in challenges in regard to language differences, potential conflicts and diversity management implementation (Seliverstova, Y., 2022). Some other struggles include lack of interpersonal relationships lower motivation and commitment as well as difficulties in achieving shared results and establishing team confidence (Seliverstova, Y., 2022). Research has also identified that remote work has an influence on turnover intention and professional isolation (reflected in lack of development, career growth and lowered organizational trust) as well as counterproductive work behaviours (due to work-life conflicts) (Nemțeanu, M.-S., & Dabija, D.-C., 2023). In line with work-life conflicts, this not only negatively affects wellbeing through a lack of boundaries, but also affects work behaviours in a negative way as well and results in delays in task completion, mistakes and inefficient communication amongst others (Nemțeanu, M.-S., & Dabija, D.-C., 2023). Remote work can also have negative implications regarding feedback on work accomplishments such as doubts, excessive information, heightened expectations and more overtime (Raišienė, A. G., et al., 2021). It can also potentially result in such challenges related to the unique conditions of remote work as difficulties in self-organising and following work routines, home distractions, difficulties in self-motivating, less inspiring work atmosphere and difficulties in obtaining understanding from the family perspective (Raišienė, A. G., et al., 2021).

Negative impacts of remote work have also been found to be linked to the various dimensions of wellbeing (Ribeiro, J., da Silva, F. P., & Vieira, P. R., 2024):

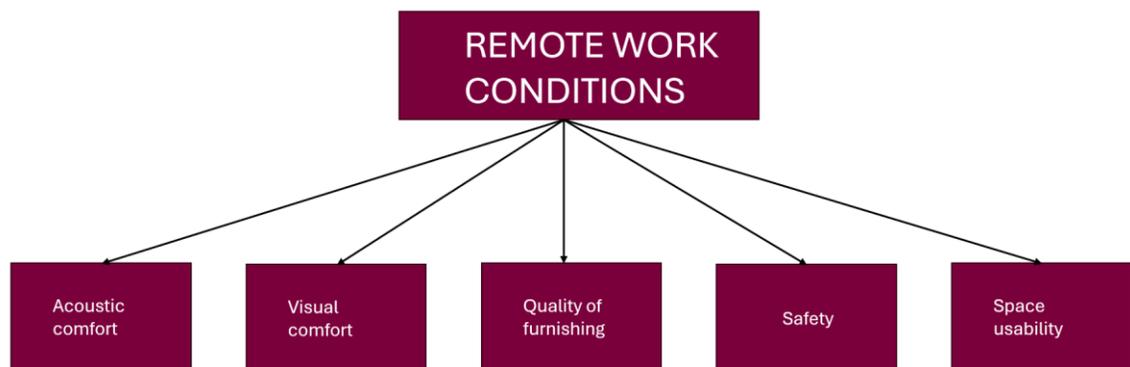
- Psychosomatic – eye strain, pain, poor posture, reduced sleep quality and other health complaints caused by the use to digital tools.
- Social – supervisor trust issues and previously mentioned social isolation.
- Cognitive – inability to disconnect from work, mental fatigue caused by the use of digital tools.
- Professional – competence to meet job expectations, technological overload.
- Affective – emotional exhaustion, lowered job satisfaction, addiction, burnout, technological dependency.

For successful implementation of remote work researchers have outlined some best practices to apply (Galanti, T., Ferrara, B., Benevene, P., & Buonomo, I., 2023):

- Clear communication and employee involvement.
- Transparent definitions that are clearly stated in employment contracts.
- Modern equipment (that is regularly updated) and accessibility to IT support.
- Implementing monitoring and evaluation systems that are not rooted in surveillance.
- Enforcing and promoting work-life balance.

In regards to remote work conditions, it is also crucial to consider the physical environment and the quality of said environment. A. L. Mura et al. (2023) highlights that in order for employees to reach sustainable development goals, it is essential to have adequate remote work conditions in place and it is not sufficient to only have good work organization and design practices. Hence, organisations require to observe the physical dimensions as well, (Mura A. L., et al., 2023) considering where potential support from the organisation would be relevant. Additionally, for physical offices assuring a suitable person-environment fit has been a priority or many years, thus this criteria could be presumed as crucial not to overlook when it comes to remote work environments as well (Mura A. L., et al., 2023). Therefore, organization can deploy the Perceived Remote Workplace Environment Quality Indicator construct developed and validated by A. L. Mura et al. (2023):

Image 1.



Resource: Created by author based on by Mura A. L., et al. (2023):

Acoustic comfort – refers to such factors as the level of silence assured in a remote workplace which has been identified in recent decades as one of the key indoor environment quality indicators affecting work environment, employee health, contentment as well as work performance (Mura A. L., et al., 2023).

Visual comfort – is defined and evaluated through such components as natural or artificial lighting in the work area. Quality of lighting is something that has been prioritised in classic offices and therefore is a significant denominator when it comes to remote work as well (Mura A. L., et al., 2023).

Quality of furnishing – refers to the quality and condition of the furniture in the workplace and their usability in handling as another component impacting remote employee physical wellbeing (Mura A. L., et al., 2023).

Safety – is evaluated through levels of perceived safety of movement in the designated workspace as we have observed during the pandemic that during remote work physically unsafe or inconvenient spaces, such as kitchen areas are deployed by employees for work purposes (Mura A. L., et al., 2023).

Space usability – is defined through such components as necessary equipment (and satisfaction with the available equipment) as well as the comfortability of the workspace (Mura A. L., et al., 2023). This is another significant component, as in remote work environments, there is often a lack of privacy (due to the need to share spaces between residents) as well as overall limitations in available space (Mura A. L., et al., 2023).

Job design, same as for non-remote work has an impact on adaptivity to the working model. Such job characteristics include high task variety and autonomy, high level of need and demand for creative problem solving and high level of connectivity across teams (Fuchs, C., & Reichel, A., 2023). However the physical environment also has been observed to impact employee performance and may indicate either that remote work is not sustainable for particular employees (Mura A. L., et al., 2023) or that organisational support in improving said conditions may be needed. Managers and HR have crucial roles in work-design and adapting characteristics of the work to receive desired outcomes (Fuchs, C., & Reichel, A., 2023), thus the interconnection between the remote work conditions and restrictions are an important area to observe in relation to not only the relationship with the employee, but with HR and managerial competencies, which will be discussed in further sections. In accordance to the reviewed literature, remote work conditions have significant implications across the whole organisation as well as have an external impact (through personal and social relations as well as sustainability) and thus is a relative construct to be studied in relation to the various areas of organisations.

1.2. Theoretical aspects of Organisational Wellbeing

The World Health Organization (2004) defines wellbeing as the state in which an individual is able to realize their own ability and have the capacity to handle stress factors that they come across

in their day-to-day life. In relation to the workplace, the forementioned definition describes the state that allows employees to conduct their work effectively and, in this regard, contribute to ones' community. Organizational wellbeing is defined as the emotions and senses stemming from the extrinsic and intrinsic value of work (Butvilas, T., et al., 2023). The definition of employee wellbeing can be split into three parts – the employee level (physical, emotional, psychological), the workplace level (work environment) and the employee experience (affected by physical and internal environment of the work) (Butvilas, T., et al., 2023). The struggle with defining wellbeing in a unanimous, holistic way stems from the multi-dimensionality of the phenomena. Researchers have pointed out that wellbeing is defined by its constituents, which are life well-being, workplace well-being and psychological well-being (Jaškevičiūtė, V., 2021). Thus, even when focusing on the role of the organization, other dimensions of well-being need to be evaluated and taken into account as well. Wellbeing is often deemed synonymous to concepts of welfare, life satisfaction, self-acceptance, comfort, prosperity and security (Catană, Ș.-A., Toma, S.-G., Imbrișcă, C., & Burcea, M, 2022). It is also important to note the difference between the terms of wellness and wellbeing. Whilst well-ness is a two-dimension phenomena that refers to physical and mental health and concepts of illness prevention, lack of risk factors, well-being is multi-dimensional and includes the many factors of wellbeing – physical emotional, social, financial, spiritual (Chlebanova, L., et al., 2022).

Organizational wellbeing can also be defined by placing emphasis on the organization and has been previously referred as the capabilities of an organization to increase and support physical, psychological and social wellbeing across all employees (Chlebanova, L., et al., 2022). The term organizational wellbeing specifically focuses on how supporting these various dimensions can positively impact such factors as employee engagement and experiences at work (Chlebanova, L., et al., 2022). Generally, most definitions of organizational wellbeing have been found to have one main concept, which is to help people align themselves and be able to function in a positive manner whilst at work (Donaldson SI, van Zyl LE, Donaldson SI., 2022). The functioning positively component refers to both positive emotional experiences of the employees and the various factors needed by the employee to perform ones' job well (Rothman as cited by Donaldson SI, van Zyl LE, Donaldson SI., 2022). Academic research often adapts the broad definition of employee wellbeing by Grant et al. (2007) of it being the general quality of employee experience while at work (Sakka, G., & Ahammad, M. F., 2020). In an organizational setting, psychological wellbeing is the subjective experiences of employees with a focus being on the psychological outcomes of such experiences (Sakka, G., & Ahammad, M. F., 2020). Said outcomes include engagement, satisfaction and commitment (Sakka, G., & Ahammad, M. F., 2020). Physical wellbeing in the organizational setting refers to the objective physical indicators of individuals health state (Sakka, G., & Ahammad, M. F., 2020). In this context the indicator of poor health in the workplace is reflected in levels of exhaustion (Sakka, G., & Ahammad, M. F., 2020). Recent literature defining wellbeing attempts to combine the dimensions of happiness and health (Elorza et al. as cited by Sakka, G., & Ahammad, M. F., 2022). In the organizational setting social or relational wellbeing can be defined more specifically through the relationships with one's colleagues or through the relationships with supervisors and the overall organization (Sakka, G., & Ahammad, M. F. Sakka, G., & Ahammad, M. F., 2022). In this context

the social and relational wellbeing can otherwise be referred to as workplace relations (Sakka, G., & Ahammad, M. F., 2022).

The multidimensional concept of wellbeing is thus often defined by breaking it down to its various dimensions – human, social, economic capital, physical, psychological, social, economic, environmental, health, political, physical and residential (Bocean, C. G., et al., 2022). Economic dimensions of wellbeing are defined through satisfaction in income, levels of perceived stability and the state of the labour market (Bocean, C. G., et al., 2022). Whereas the social wellbeing is defined through the social status provided by the income and profession and concepts of security, community, cohesion, trust, reciprocation, involvement levels and quality of informal interactions (Bocean, C. G., et al., 2022). Research commonly points out that there is no one definitive definition of work wellbeing and it is continuously expanded through addition of more dimensions that construct the phenomena (Petcu, M. A., et al., 2023). Contemporary work has been found to often connect wellbeing to subjective emotion, thus once again affirming the connection between work wellbeing and subjective wellbeing (Petcu, M. A., et al., 2023). In this regard work wellbeing can be interlined with affective wellbeing as well (Petcu, M. A., et al., 2023). Affective wellbeing relates to the various experiences of the individual that are affected by the individuals' emotions (Petcu, M. A., et al., 2023). Affective wellbeing can also be linked to the previously mentioned psychological wellbeing (Petcu, M. A., et al., 2023).

Additionally, previous research has found that employees themselves conceptualize workplace health and wellbeing as occupational health and safety, mental health, nutrition, physical activity and general health issues (Pescud, M., et al., 2015). Wellbeing can also be defined through the hedonic perspective, which defines wellbeing as happiness (Ryan and Deci as cited by Keeman, A., et al., 2017). In this sense wellbeing is achieved through satisfaction in life, positive moods and lack of negative moods (Diener et al. as cited by Keeman, A., et al., 2017). The other perspective is eudaimonic and defines the term through self-actualization and expression of virtue and is achieved through focus on development, autonomy, self-acceptance and existence of purpose (Keeman, A., et al., 2017). Another perspective emerged from the two that combines them and once more proposes a multidimensional approach to defining wellbeing (Fisher, 2014). In this regard wellbeing at work refers to general satisfaction and experience of positive feelings in relation to work (Fisher, 2014). In addition to this, another, important component to organizational wellbeing is once again social relationships (Fisher, 2014).

Research on the topic has previously placed focus on the concepts of employee mindset, managing work, developing relationship networks, active development, satisfaction levels and interactions with sources of stress in the workplace (Butvilas, T., et al., 2023). Wellbeing can be split into two perspectives – internal and external (Gorgenyi-Hegyey, E., Nathan, R. J., Fekete-Farkas, M., 2021). The internal dimensions include physical well-being, emotional well-being, intellectual well-being and spiritual wellbeing (Gorgenyi-Hegyey, E., Nathan, R. J., Fekete-Farkas, M., 2021). Whereas the external dimensions are environment well-being, social well-being, financial well-being and workplace well-being (Gorgenyi-Hegyey, E., Nathan, R. J., Fekete-Farkas, M., 2021). A few main

types of wellbeing that research has focused on include (Catană, Ș.-A., Toma, S.-G., Imbrișcă, C., & Burcea, M., 2022):

- Subjective wellbeing – cognitive and affective evaluation of life in a general sense which is everchanging and is perceived through life satisfaction levels.
- Psychological wellbeing – a state absent of dysfunctionality as stress affected by various components of an individual's daily life.
- Social Wellbeing – evaluation of individuals circumstances in life and functionality in a social setting through levels of social integration, contribution, coherence actualization and acceptance.

Organizational well-being specifically in previous research has been split into the following dimensions (Chlebanova, L., et al., 2022):

- Professional:
 - 1) Education – professional internal and external training.
 - 2) Supervision – a focus on problematic clientele and methods of working with such clients, developmental support, observation of organizational wellbeing with the purpose of improvement and the process of deinstitutionalization internally and externally.
- Social:
 - 1) Employee meetings – informal meetings such as work parties and trips.
 - 2) Building positive relationships – the existence and formation of positive relationships in the work environment.
- Emotional – creating a homely atmosphere in the workplace.
- Physical – providing a rational diet and establishing principles of healthy nutrition through food provision (depending on the industry, can also include moderating time spent at the computer or implementing policies for assuring safety amongst others).
- Occupational – referring to funding employee vacation time.
- Other – opportunities to express opinions on the functioning of the organization.

There are several other dimensions of employee wellbeing that can be added to the list (Gelencsér, M., et al., 2023):

- Nature of work – if the work is felt to be meaningful, challenging there is variety in task complexity, a level of ownership and flexibility the perceived employee wellbeing has been shown to be higher.
- Coworkers – positive employee relations are one of the contributors to long-term employee engagement and wellbeing.
- Supervision – managers are often stated as the reasoning behind employee termination, over the organisation itself and thus are identified to have a high impact on the perceived wellbeing level.
- Pay and contingent rewards – this metric is argued to not align with the wellbeing topic, however, is at times included in literature as research has shown that employees satisfied with their

compensation feel a higher level of job satisfaction and it remains as one of the main tools for employee attraction and retention.

- Promotion – career development possibilities have been tracked to have a positive relation to job satisfaction.
- Operating Procedures – dissatisfaction with operational procedures, in relation to efficiency and strictness may have an impact on reduced wellbeing.
- Communication – internal organisational communication has a positive impact on the employees’ perception of the employer, specifically referring to the scope and clarity of communication in the organization.

General Wellbeing can be measured using the WHO-5 Well-being scale by the World Health Organization that has been widely adapted since its establishment in 1998. The five-item scale evaluates levels of cheerfulness/good spirits, calmness/relaxation, vigorousness, rest/freshness in the mornings and sense of interest in daily life activities. The scale has been found as non-invasive survey that is able to in adequate validity evaluate individual subjective wellbeing and can be adapted as a tool for screening of signs of depression and thus has been used in numerous study fields (Topp, C. W., et al., 2015) including work related wellbeing evaluation.

In recent years the importance of employee wellbeing in relation to retention and competitive advantage has increased (Gelencsér, M., et al., 2023). As a result, organisations and academics have broadly adapted the use of a concise scale developed by X. Zheng et al. (2015) to measure wellbeing. The scale focuses on three main dimensions of wellbeing – life, work and personal wellbeing (Zheng, X., et al., 2015). Through interviews with employees the researchers identified that wellbeing as a concept incorporates the forementioned three main areas (Zheng, X., et al., 2015). The researchers propose that employee wellbeing not only work and life satisfaction but also their psychological experiences both in life and at work (Zheng, X., et al., 2015):

Image 2.



Resource: Created by author based on Zheng, X., et al. (2015)

Life Wellbeing – refers to level of satisfaction in life, general satisfaction in life conditions and how closely does the employee perceive themselves as to having achieved their goals in the main areas of their life (Zheng, X., et al., 2015).

Work Wellbeing – includes satisfaction level in the employees' work duties and the general satisfaction with work itself as well as perceived level of enrichment that the employee achieves as a result of the work they conduct (Zheng, X., et al., 2015).

Personal Wellbeing – describes perceived levels of growth, communication capabilities and satisfaction in social interactions in such form as well as how the employee perceives their external evaluation of themselves (referring to what level do others perceive the individual as someone willing to devote time to others) (Zheng, X., et al., 2015).

The employee wellbeing scale developed by Zheng, X. et al. (2015) is a useful tool that can not only be used for self-diagnostic purposes that would enable employees to self-monitor and manage own wellbeing, but also the scale is a beneficial tool for managers that they can deploy when adapting wellbeing management practices. Through the use of the scale managers can identify required interventions and implement them in a timely and effective manner resulting in holistic workforce management solutions (Zheng, X., et al., 2015). The scale can be thereafter deployed to re-evaluate wellbeing practices and adjust them as needed (Zheng, X., et al., 2015). Zheng, X. et al. (2015) also note that through the adaptation of the measurement scale there can also be had broader positive societal implications as well (Zheng, X., et al., 2015). Studies have also identified some variables in relation to measuring employee perceived wellbeing and these include age, working time, level of education and household income (Petcu, M. A., et al., 2023).

Studies have found wellbeing to be an indicator of employee performance quality and have even related it to both quality of professional life and personal life (Petcu, M. A., et al., 2023). Wellbeing can be affected by various factors that are not limited to the workplace. This topic was highly studied in regards to COVID-19 and has identified some factors that are relevant outside of the pandemic context as well (Surányi, R., 2021):

- 1) Family situation/personal issues:
 - Responsibilities related to childcare.
 - Responsibilities related to home maintenance.
 - Insecurities.
 - Lack of exercise (potentially obesity).
 - Stress and other psychological issues.
 - Poor healthcare conditions.
 - Need to provide elderly care.
- 2) Work issues:
 - Financial problems.
 - Work-life balance.
 - Logistical issues.
 - Challenging working conditions.
 - Poor technical conditions.
 - Inadequate capabilities from the managerial perspective.

- Lower level of personal contact.
- Adaptation to new tasks or responsibilities.

Researchers have studied the impact wellbeing interventions have on employee perceived wellbeing and have found that they can have a positive effect on forming connections with colleagues (Keeman, A., et al., 2017). Furthermore, such interventions have been found to result in lower levels of stress in employees as well (Keeman, A., et al., 2017). Additionally, research has noted that wellbeing can be a prerequisite for positive attitudes and behaviours in relation to work, such as increases in job engagement, lower turnover and overall more positive relationships in teams (Keeman, A., et al., 2017). Research has identified vast practices that contribute to employee wellbeing. Such practices include mature and modern recruitment and candidate selection processes, providing extensive training, fostering employee participation through a high level of involvement, implicating performance appraisals, providing competitive compensation and various other HR practices (Salin, D., et al., 2023). Newer literature is focusing more on intrinsic wellbeing promoters as well as highlighting the role of HR practices in wellbeing, now focusing more on the factors of job satisfaction, stress levels at work, and levels of trust in management (Petcu, M. A., et al., 2023). Recent studies have also placed focus on the remote work relationship in different demographics. For example, Gen Z has shown to have higher levels of perceived autonomy, lower levels of stress and an improved perception of work-life balance in relation to remote work (Robak, E., 2023).

In relation to previous literature, wellbeing is classified as a crucial component to be taken account by management and HR professionals. Studies have identified the various dimensions and components of wellbeing and best practices to measure them as well as the implications that poor wellbeing and respectively high levels of wellbeing have on the individuals themselves, as well as organisational outcomes and even more broadly – the social implications in relation to this. It is a broadly discussed topic both in organisational settings and the academic world and in line with it being significantly affected by various external and external factors it remains a developing phenomenon that is there for relevant to be studied further. In accordance to previous research HR and managers bare a responsibility in supporting employee wellbeing, thus the topic of employee wellbeing in relation to managerial competencies, work conditions and HR policies are of relevance both to organisations and to academic research.

1.3. Theoretical aspects of Digital Leadership Competencies

Technological advancements in the current century have affected various aspects of organisations and this includes management as well (Tigre, F. B., Curado, C., & Henriques, P. L. , 2023). There are a few pillars of the technological advancement that should be noted in this regard. These include Internet of Things (IoT), artificial intelligence (AI), machine learning (ML), and big-data analytics (BDA) (Chatterjee, S., et al., 2023). However, the transition towards the current concept of digital leadership started in the late 1900's with the surgency of email, video meetings and the

internet (Avolio as cited by Tigre, F. B., Curado, C., & Henriques, P. L. , 2023). In line with effective digital leadership and high-levels of quality communication, digital leadership as opposed to face-to-face leadership is actually considered to have some benefits, such as encouraging involvement in decision making and higher levels of self-reliance (Walvoord as cited by Tigre, F. B., Curado, C., & Henriques, P. L., 2023). One of the recent perspectives on digital leadership defines the phenomenon as a combination of digital transformation and digital skills with one of the requirements being adaptability to change (Mollah, Md. A., et al., 2024).

The predecessor of the term digital leadership was e-leadership, which has been defined in previous literature Avolio, B. J. (2014) as “a social influence process embedded in both proximal and distal contexts mediated by AIT that can produce a change in attitudes, feelings, thinking, behavior, and performance.”. In this regard, researchers have outlined the role of e-leaders as legitimators, manipulators and regulators of behaviour related to digital tools as well as role models (through use of said digital tools as well as participation in strategy formation and projects) (Avolio, B. J., et al., 2014). However, later research by Van Wart, M. et al. (2019) has noted that the aforementioned definition is quite abstract and focuses on the effects of digital communication tools and lacks the mention of the notion of blending digital and traditional practices. In regards to this, later research has attempted to formulate the definition of e-leadership in a less abstract manner by defining it as “effective use and blending of electronic and traditional methods of communication. It implies an awareness of current ICT’s, selective adoption of new ICT’s for oneself and the organization and technical competence in using those ICTs selected” (Van Wart, M., et al., 2019). The purpose of the adjusted definition is to capture the value of hybrid strategies, mixing traditional and digital styles as well as reveal the assumptions of the operation definition, which is that e-leadership refers to the responsibility of the leaders to adapt the use of digital tools across the organization (Van Wart, M., et al., 2019). In this regard, effective use refers to:

- Identification of areas where digital communication tool usage would have advantage.
- Depending on the available resources, using the most suitable and relatively best digital communication tools only.
- When possible and applicable, using physically present communication tools.
- Displaying competence in usage of digital communication tools (same as when distinguishing a capable speaker and a lacking communicator in regards to in person communication).

In this regard e-leadership can be defined through the competencies that need to be possessed by managers (Van Wart, M., et al., 2019):

- E-communication skills – defined as clarity and efficient management of communication flow whilst reducing miscommunications.
- E-social skills – defined through sufficient and quality support provided by the leader.
- E-team building skills – defined as ensuring of team motivation, accountability and recognition amongst the team.

- E-change management skills – defined as change handling support through planning, monitoring of implementation and adjustment of application practices.
- E-technological skills – defined as knowledge and effective use of recent digital tools as well as ability to combine the use of traditional and digital tools and strategies.
- E-trustworthiness – defined as support of work-life balance, diversity management and establishment of trust through displays of honesty, consistency, integrity, fairness and follow-through.

When it comes to e-leadership, some traits outlined to have a positive influence on the quality of e-leadership include self-efficacy, extroversion (has been related to likelihood of providing social support and fostering problem solving in previous literature), linguistic capabilities in written communication, open-mindedness as well as social capabilities (Avolio, B. J., et al., 2014). As for behaviours correlated to effective e-leadership, previous literature has identified the following (Avolio, B. J., et al., 2014):

- Flexibility – ability to adjust leadership style as needed from directive to participative or from transactional to transformational and vice versa.
- Structuring and goal setting – establishment of values, norms and common practices.
- Participatory and transformational behaviours – fostering idea exchanges, enhancement of information sharing processes and support for creative solution generation.
- Input-solicitation and offering of support – providing support in outlining responsibilities and fostering a sense of familiarity to combat common issues of virtual teams such as perceived lack of communication.
- Conflict resolution – through processes of building consensus, identification of shared values and goals as well as intellectual stimulation to support understanding of varying viewpoints.
- Frequent communication – outlining purposes and assuring consistency in the workforce.
- Providing effective feedback.
- Assuring consistent task delegation.
- Providing a sense of social connection to support learning activities.

Furthermore, recent research has also begun to differentiate between e-leadership and digital leadership, implying the latter to be a concept beyond technological mediation (Alkhayyal, S., & Bajaba, S., 2024). The concept of digital leadership is not considered to be in its maturity stage yet and is shifting the paradigm of management at a fast pace and is evidently expected to remain highly relevant and researched in the upcoming years (Tigre, F. B., Curado, C., & Henriques, P. L., 2023).

With the concept of digital leadership being so novel, the behaviours required from managers are constantly changing and developing (Senadjki, A., et al., 2024). A definitive, reliable scale for evaluating digital leadership is yet to be developed (Abbu, H., et al., 2023). Digital leaders are

expected to possess a set of specific abilities to be able to execute digital leadership efficiently. These skills include literacy in digital communication tool usage, effective communication and networking capabilities, adapting digital tool possibilities based on organisational goals and to be able to lead by example to the rest of the organisation by being advocates for utilising technological tools and leveraging their possibilities (Öngel, V., et al., 2024). Digital skills that managers are required to possess include ability to use available IT infrastructure, data, cloud computing, mobile communication, and social media communication not only for the purposes of meeting client needs, but for the internal functionalities of the organization as well (Mollah, Md. A., et al., 2024). However, it is important to note that digital skills aren't the only capabilities required of such leaders. Character and behaviour aspects have been found to be crucial as well. Such characteristics include positive attitude, life-long learning, inclination to knowledge sharing, and an inclusive demeanor (Mollah, Md. A., et al., 2024). Thus the concept of emotional intelligence has a moderating effect on digital leadership perceived skillfulness (Li, Z., et al., 2024). The particular leadership style has an impact across individual, team, and organizational levels, including in itself attitudes, emotions, thought processes, behaviours, and performance results (Li, Z., et al., 2024).

Digital leadership is also being identified as one of the factors that enhances employee performance, not only through effective communication, but also encouraging knowledge sharing and collaboration (Öngel, V., et al., 2024). Moreover, the digital leadership competency level can influence the employees on the factor of adapting to digital tools and technology (Senadjki, A., et al., 2024) which is a crucial skill in a remote working environment. Managers play a critical role in supporting digital working environment policy implementation, encouraging employees to become more digitally literate themselves as well as assure work-life balance adaptation for the employees (Chatterjee, S., et al., 2023). Research has identified many beneficial implications of adapting digital leadership competencies into organizations, such as higher financial performance and faster digital transformation across the company as a whole (Senadjki, A., et al., 2024). It has also been found to be a mediating factor in organizational sustainability (Mollah, Md. A., et al., 2024). Beyond performance digital leadership has been tracked to have a positive impact on employee engagement as well (Li, Z., et al., 2024). Additionally, in regards to the context of recent years and how quickly technology is advancing, digital leadership has become key to support timely decision making and fostering development (Jäckli & Meier as cited by Tigre, F. B., Curado, C., & Henriques, P. L., 2023). There is a lot of nuance involved in digital leadership as a concept and managers are required to maintain a very balanced relationship with the employees by providing autonomy, but minimizing the sense of isolation, and adaptation to change whilst maintaining what is known to be good practice, as well as support of a clear purpose (Pulley et al. as cited by (Jäckli & Meier as cited by Tigre, F. B., Curado, C., & Henriques, P. L., 2023).

On the other hand, lacking digital leadership competencies can result in informational overloads, perceived lack of authenticity and privacy, senses of deception, ambiguity and a lack of transparency (Avolio, B. J., et al., 2014). Furthermore, ineffective digital leadership can result in reduced levels of trust, visibility and perceived levels of support (Avolio, B. J., et al., 2014). In line

with this, research has outlined the main challenges of challenges of e-leaders or digital leaders to be (Avolio, B. J., et al., 2014):

- Identifying and successfully adapting strategies to increase the use of digital tools in organisations.
- Successfully fostering transparency and openness.
- Dealing with negative implications of constant communication.
- Managing tracking of the workforce without resulting in a sense of absence of trust.
- Handling challenges related to replacement of in-person communication with digital communication.

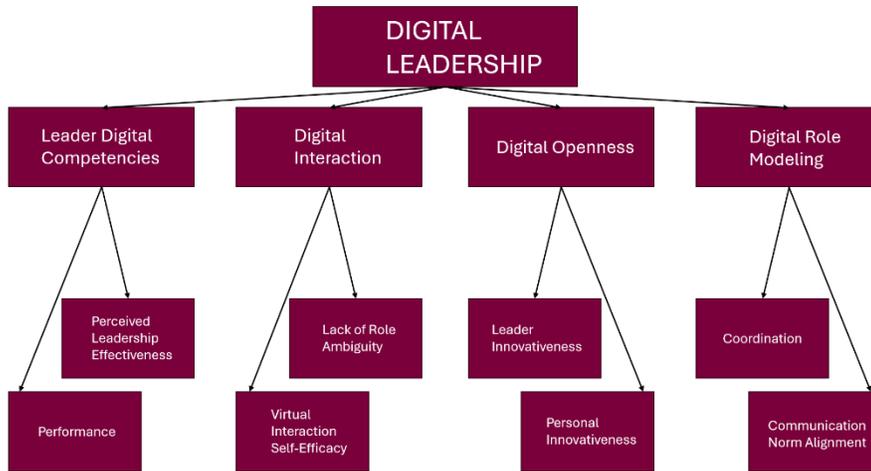
Later research has identified some other issues related to lacking digital leadership skills (Van Wart, M., et al., 2019):

- Insufficient and lacking communication – exemplified through poor instructions, lack of tendency to highlight achievements, not providing subordinates with opportunities to ask questions about tasks, etc.
- Miscommunication – offensive comments and misunderstood jokes and ideas.
- Chaotic communication – lack of systemisation in communication, resulting in repeated communication and existence of large numbers of channels of communication to track.
- Perceived lack of support – as a result of unwillingness or lack of know-how from leaders.
- Lacking change management – inability to support adaptation of new technologies.
- Lacking digital usage skills – resulting in inability to support and educate subordinates.
- Underutilizing digital tools – displayed through reluctance to change justified by difficulty and unreliability of digital tools.
- Poor security – lack of guidelines on appropriate data handling.
- Reduced sense of trust in leaders – as a result of perceived distance and reduced social interactions.
- Inability to disconnect and separate work and private lives.
- Inability to consider gender and ethnic issues.
- Reduced sense of motivation.
- Lacking assertion of accountability.
- Perceived lacking sense of attention.

One of the perspectives of evaluating digital leadership is through the social exchange theory, which evaluates the social behaviours of individuals from the basis of exchange. From this perspective digital leadership is the offering of the managers that then results in numerous and various reciprocations from the employees (Li, Z., et al., 2024). Another method of measuring digital leadership competencies is using the digital leadership competency scale, which breaks down the construct into 4 main areas that can be further broken-down into 8 dimensions. Research has found

perceived digital leadership effectiveness to be reliant on such components as transformational and transactional leadership, structure in relation to the work and task orientation (op 't Roodt, H., et al., 2024).

Image 3.



Reference: Created by author based on op 't Roodt et al. (2024)

Leader Digital Competencies –op 't Roodt et al. (2024) define leader digital competence as leaderships response to challenges related to technology. In this regard the researchers identify perceived leadership effectiveness and performance as outcomes of leader digital leaderships' presence (op 't Roodt, H., Bracht, E. M., van Dick, R., & Hernandez Bark, A. S., 2024).

Digital Interaction –The scale developed by Roodt et al. (2024) evaluates digital interactions through the level of appropriateness of digital communication conducted by the manager, existence of communication norms, ability to lead teams using digital tools as well as ability to identify the best suited tools for the specific situations and the overall digital communication quality between the leader and the employee.

Digital Openness – Roodt et al. (2024) evaluate digital openness based on how open is the leader perceived to be to new technologies and the leaders reactions to technological innovations from the perspective of the employees.

Digital Role Modeling – in the scale developed by Roodt et al. (2024) the dimension evaluates digital role modelling from the following perspectives – to what degree the leader role models the usage of digital tools, does the manager support in identifying ways to appropriately use said media tools (for example, through establishment of rules) and to what degree is the manager able to set clear boundaries for digital tool usage (in efforts to have it used appropriately).

Roodt et al. (2024) identify the scale to be a useful tool in identifying areas for development in leaderships digital competencies and can support in identifying relevant actions needed to support said management. The scale has been found to support in identifying reasonings between variances in technological performance and to employee performance in a broader sense as well (op 't Roodt,

H., Bracht, E. M., van Dick, R., & Hernandez Bark, A. S., 2024). Research conducted by Roodt et al. (2024) has identified the scales to be a useful tool in supporting employees in effective navigation in the remote and digital work context.

The concept of digital leadership is not considered to be in its maturity stage yet and is shifting the paradigm of management at a fast pace and is evidently expected to remain highly relevant and researched in the upcoming years (Tigre, F. B., Curado, C., & Henriques, P. L., 2023). In regards to this the topic of digital leadership and the correlating competencies is highly relevant to be studied further. Additionally, in regards to reviewed literature, it is evident that digital leadership competencies have implications for employees and the organisations in a broader sense as well, however with emergence of new digital tools and shifts in remote work practices the implications and relevant competencies are of interest to be analysed and re-evaluated. Furthermore, digital leadership can be influenced positively or ineffectively by various HR practices, thus the topic of digital HR management practices is of valid relevancy as well.

1.4. Theoretical aspects of Human Resource Development

Previous research has addressed Human Resource Management and Human Resource Development as synonymous concepts (Werner, J. M., 2014). In 1989 McLagan defined Human Resource Development through three main areas – training and development (classroom training and coaching), career development (preparation of employees for future jobs and upcoming responsibilities) and organizational development (addressing issues related to organizational structure and potential changes) (as cited by Werner, J. M., 2014). This depiction was later expanded by Davis et al. in 2004 by separating the concept through two areas – traditional HRM (staffing, compensation, benefits, information systems, labour relations, rewards, job design and employment relations) and organizational (operations, distribution, marketing, customer services, finances, legal, research) disciplines (as cited by Werner, J. M., 2014). York (2005) has defined the main purpose of Human Resource Development as the contribution “to both long-term strategic performance and more immediate performance improvement through ensuring that organizational members have access to resources for developing their capacity for performance and for making meaning of their experience in the context of the organization’s strategic needs and the requirements of their jobs”. Human Resource Development can otherwise be defined in line with its purpose as the overlap between organizational culture, structure, strategy and Human Resource Management (Werner, J. M., 2014).

Notably, Human Resource Development as a concept is influenced by the global context that it operates in and thus the concept of Global Human Resource Development has been outlined in previous literature as a separate type of the phenomena (Garavan, T. N., & McGuire, D., 2010). Many organizations nowadays operate across multiple locations and thus are required to conduct global Human Resource Development that is adapted to said contexts (Garavan, T. N., & McGuire, D., 2010). Another type of Human Resource Development is strategic, which can be defined as alignment of

developmental activities conducted by Human Resource practitioners and the organizational strategies (Garavan, T. N., & McGuire, D., 2010). The formation of Human Resource Development as a concept has been strongly influenced by psychological theories and has been in later research expanded through the addition of the growth mindset phenomena (defined as the conviction that individuals are able to develop human attributes) as mindset framing has been found to have a positive impact on learning design and employee performance (Han, S. J., & Stieha, V., 2020). Researchers have outlined Human Resource Development practices as (Han, S. J., & Stieha, V., 2020):

- Work Engagement, task performance and levels of persistency.
- Evaluation of the performance conducted by others and the level of ability to evaluate said performance (in relation to the belief that the skills of others can be changed and developed).
- Maintenance of an organizational mindset or exemplification of organizational citizenship.
- Exemplification of responsiveness in relation to culture as well as being aware of potential stereotypes and prejudices.
- Valuing and fostering creative and entrepreneurial behaviours.
- Application of effective management practices.

Researchers have also previously defined the role of Human Resource Development practitioners in relation to its ethical, corporate sustainability and social responsibility outcomes as (Garavan, T. N., & McGuire, D., 2010):

- Identifying stakeholder groups and their main social needs.
- Performing reactive and proactive social actions.
- Communication regarding socially responsible actions.
- Enhancement of stakeholder relationships.
- Showcasing a high level of ethical awareness.
- Fostering and implementing clear communication across stakeholder groups.

In relation to this perception, Human Resource Development systems are required to address ethical and social issues as well as having a socially responsible approach being imbedded in all organizational activities (Garavan, T. N., & McGuire, D., 2010). Furthermore, said purposes are then imbedded in Human Resource Development practices and policies that develop corporate culture, employee awareness, improve external stakeholder recognition, reduce discrimination as well as improve relationships with the broader society and communities (Garavan, T. N., & McGuire, D., 2010). Human Resource Development has also been referenced in previous research in correlation with the term – learning organisations, which can be constituted as the end goal of implementing Human Resource Development practices. A learning organisation is defined as a company that has embedded capacities to adapt or be able to respond in a prompt way by implementing innovative methods to remove barriers for organisational learning (Marsick, V. J., & Watkins, K. E., 2003).

In relation to digital transformations across organizations and the shifts to remote or hybrid work, the concept of Virtual Human Resource Development has emerged. McWhorter (2022) defined Virtual Human Resource development as “a strategic, media-rich webbed environment, one that is

typically based on one or more intranets or private knowledge management systems which become a seamless conglomeration of many things useful for learning and virtually limitless in expandability”. Previous researchers have outlined that Virtual Human Resource Development should be viewed as the core of the organization consisting of learning as well as socialization practices (Rahimi, S., et al., 2022). An important component of the phenomenon is also engagement with different cultures as well as adaptation to differences that thereafter improve the learning experiences (Rahimi, S., et al., 2022). The concept also takes into consideration the social context and allows equal opportunities in relation to access to learning (Rahimi, S., et al., 2022). Researchers have identified suitable cultural environments, community forming and learning processes as the main dimensions of Virtual Human Resource Development (Rahimi, S., et al., 2022). Other important concepts in relation to this are identified to be knowledge managing, socializing, critical human resource development and national human resource development (Rahimi, S., et al., 2022). In regards to this, virtual human resource development can otherwise be defined as the central component of Human Resource Development and organizational processes in relation to the virtual workspace and digitalization context in reference to employee learning and socialization activities in the workplace (Rahimi, S., et al., 2022). Furthermore, when implementing Virtual Human Resource Development practices, practitioners are also in need to consider the psychological attributes of both the employees as well as their virtual work context (Rahimi, S., et al., 2022). This is exemplified in practice through awareness of generational trends and gaps, technological skills, motivators and the cognitive capabilities of the employees (Rahimi, S., et al., 2022).

Researchers have identified competencies of training and development as performance improvement, instructional design, training delivery, learning tools/technologies, evaluation of impact and management of said learning programs, integration of talent management practices, coaching support, management of information and fostering of change (Arneson, J., Rothwell, W., & Naughton, J., 2013). In relation to the aforementioned dimension of growth mindset and its integration into Human Resource Development practices, previous research has summarised the outcomes of said practices as (Han, S. J., & Stieha, V., 2020):

- Higher employee engagement.
- Improved work performance.
- Improvement of learning capacity regardless of learning disabilities of the individuals.
- Higher level of openness to change across managers and employees.
- Improvement of creative abilities.
- Higher level of entrepreneurial behaviours.
- Positive impact on team cultures.
- Improved perception of the workplace.
- Managers exemplify a higher level of humility.
- Higher levels of wellbeing and perseverance in relation to task execution.

In academic research challenges of Virtual Human Resource Development specifically have been summarised as (McWhorter, R. R., 2023):

- Inadequate technological tools than what has been previously made available in the workplaces.
- Immersion of cybersecurity concerns (in relation to lacking policies for protecting employee and organizational data management).
- Inadequate management of newly gained knowledge using digital tools.
- Immersion of barriers for older employees in relation to learning.
- Technological addictions as well as more distractions and a heightened sense of overwhelm in relation to technological tools that are in use in addition to disruption of work-life balance.
- Unpredictability of upcoming changes to the technologies in use.
- Employees with lacking technological skills being left behind.
- Immersion of trust issues.

On the other hand, benefits of successful Virtual Human Resource Development practice adaptation include (McWhorter, R. R., 2023):

- Enables adult learning possibilities and fosters collaboration across individuals.
- Supports dynamic learning and adaptation of innovation.
- Improved employee development, learning and performance results.
- Cost savings in relation to custom training space usage as compared to in person scenario planning practices.
- Intranet supports community formation as well as informal learning.
- More realistic and immersive training.

In previous academic research both opportunities and challenges of Virtual Human Resource Development have been analysed from the following main themes – its role in the context of potential crisis, knowledge management, adult learning, formal/informal learning, management of the workforce using digital tools, development measurement, skill development, social presence, organizational culture, security/privacy, virtual interventions, digital tools (McWhorter, R. R., 2023). Through a comprehensive academic literature review McWhorter (2023) has identified the following requirements for HR professionals in relation to successful adaptation of Virtual Human Resource Development:

- Practitioners benefit from taking risks in relation to adapting modern digital tool usage.
- Strategic implications must be taken into account when adapting usage.
- Practices need to be regularly evaluated and reviewed.
- Generational trends need to be taken into account and materials need to be adjusted accordingly.
- Human Resource Development professionals are in need to develop new skills relevant to application of Virtual Human Resource Development adaptation in practice.
- Engage in critical discussions regarding digital tool developments.
- Incorporate a sociomaterial perspective into evaluation of practices, tools and applications.

- Provide assistance to virtual teams and managers to combat trust issues related to digital tool usage and virtual workspaces.
- Application of design thinking (with the addition of taking into account support needed for development at the individual and group level).
- Regularly realign resources and practices to be in line with organizational purposes.

In relation to the aforementioned purpose of Human Resource Development practices – the creation of a learning organization, Watkins and Marsick (1993) have outlined six main components of a transformational culture that require to be fostered to achieve said purpose:

- Support continuous learning practices.
- Promote dialogue and an environment where one feels comfortable to ask questions.
- Support collaboration as well as collaborative learning across teams.
- Put in place systems that allow to share information and knowledge.
- Support employees to work towards shared purposes.
- Make the organisation aware of its environment and support interconnectedness.

To measure organisational learning and development state, Watkins and Marsick (1993) point out the importance of taking into account the workforce's capacity and willingness to learn and develop, which can be evaluated based on four levels:

- 1) Changes in individual actions, knowledge and motivation levels as well as capacity in relation to learning activities.
- 2) Changes at a group level in relation to capacity to take innovative actions and create new information and knowledge.
- 3) Changes at an organizational level in relation to capacity to take innovative actions and create new information and knowledge.
- 4) Changes in the broader community and society in relation to the quality of work life and other components.

Human Resource practitioners have broadly adapted the use of the Dimensions of the Learning Organization Questionnaire to evaluate the value of the human resource development practices and their effectiveness. In regards to this, researchers have noted the importance of the collaboration between HR and leaders in efforts to foster organisational learning (Marsick, V. J., & Watkins, K. E., 2003). The dimensions of the questionnaire as outlined by Marsick and Watkins (2003) are:

- Creation of continuous learning opportunities – learning is designed in such matter that it can be incorporated into work, thus allowing individuals to learn on the job, whilst also providing with resources and possibilities to further educate oneself and grow.
- Promotion of inquiry and dialogues – capacity to both listen and ask in regards to perception and knowledge possessed by others exemplified by employees and supported by the organizational culture that fosters freely asking question, providing feedback, etc.
- Encouragement of collaboration and team learning – exemplification of the expectation that teams should learn and work together and such behaviours are rewarded by the organization.

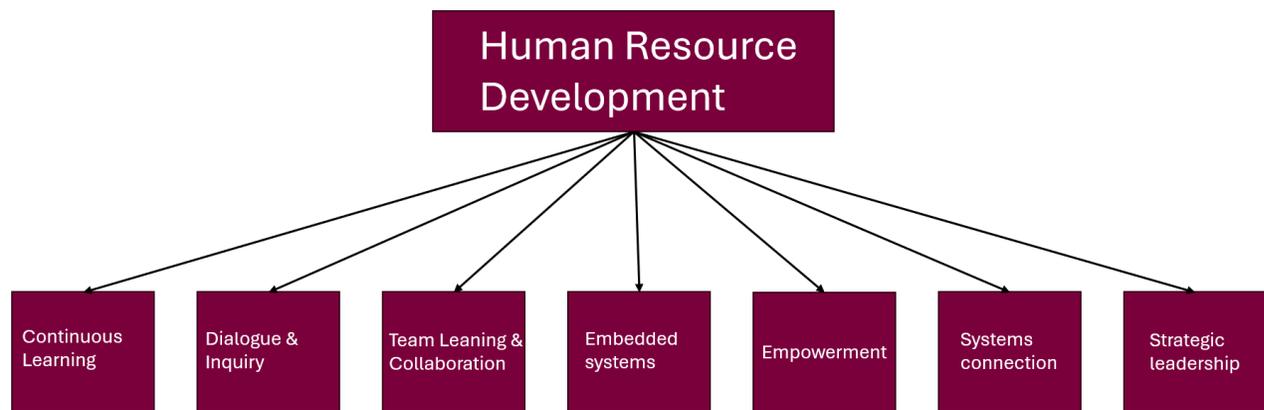
- Creation of systems that allow to save and share learnings – technological systems to which access is provided to employees and which are adequately maintained.
- Empowerment of employees to work towards shared goals – employees are included in formulating and implementing shared goals and individuals are held responsible as well as feel motivated to do so.
- Connection of the organization and the environment – employees are showcased their impact across the organization and environmental information is used to adapt work and link the company to its environment as well.
- Providing learnings related to strategic leadership to foster said leadership – managers support learning activities and are able to adapt learnings to work towards organisational goals.

In line with this, the questionnaire also measures key outcomes:

- Financial performance – financial stability and availability of relevant resources.
- Knowledge performance – product and service improvement based on knowledge gained through learning activities.

The full version of the scale consists of 43 items, however researchers have also adapted the use of the shortened version of the tool that focuses on 7 main dimensions of organizational learning (Leufvén, M., et al., 2015):

Image 4



Resource: by author based on Leufvén, M., et al. (2015)

Continuous learning – the level of support provided by the organisation in regards to learning as well as the general perceived level of support in the organisation in relation to learning and whether such activities are then rewarded (Marsick, V. J., & Watkins, K. E., 2003).

Dialogue and inquiry – evaluates whether feedback giving and asking culture is fostered by the organisation as well as level of importance placed in relation to trust building (Marsick, V. J., & Watkins, K. E., 2003).

Team learning and collaboration – defines to what degree does the organisation allow teams to have ownership of team goals as well as to what degree does the organisation take into account decisions, feedback and ideas of others (Marsick, V. J., & Watkins, K. E., 2003).

Embedded systems – evaluates whether the organisation has implemented systems that make information available, as well as measures time spent on training and the deviations from expected performance (Marsick, V. J., & Watkins, K. E., 2003).

Empowerment – indicates to what level are initiatives, calculative risk taking appreciated by the organisation and what level of control over resources spent on conducting employees' work responsibilities are individuals assured with (Marsick, V. J., & Watkins, K. E., 2003).

Systems connections – indicates to what degree the employees are steered towards taking global perspectives, surrounding communities into account whilst collaborating across the organization (Marsick, V. J., & Watkins, K. E., 2003).

Strategic leadership – evaluates the strategic leadership quality through senses of mentorship, support for learning and consistency in values exemplified by managers (Marsick, V. J., & Watkins, K. E., 2003).

The aforementioned dimensions are all relevant components of Human Resource Development practices and their successful implementation and thus are relative to be evaluated and thus taken into account when adjusting policies related to learning and development. Furthermore, in regards to reviewed literature, Human Resource Development practices result in broad benefits at the organisational as well as broader societal level and thus is a relevant dimension to be observed and regularly re-evaluated and developed accordingly.

1.5. Theoretical Aspects of Relationship between Remote Work Conditions and Employee Wellbeing

Employee wellbeing became a focus area during and as a result of the recent pandemic with companies deploying various digital tools to monitor mental, physical and social health of the workforce (Hopkins, J., & Bardoel, A., 2023). Studies have found that remote work can lead to such factors as increased feelings of isolation, which result in lower engagement and psychological distress (van Zoonen W. & Sivunen A., 2021). With Employee Engagement becoming a measured metric in an increasing number of corporations, recent research has also placed a lot of focus on understanding the Employee Engagement phenomena and its relation with remote working practices. More specifically, what personal factors may impact Employee Engagement (Mäkikangasa A., et al., 2022). The research outlines such characteristics as job-related self-efficacy, and job crafting capabilities to be related to capabilities of maintaining high level of engagement even when working remotely. Some organisational factors that are also highlighted to have impact on engagement levels are for example, level of organisational support which would cover the role of the leader as well.

Previous research has furthermore developed the term E-Well-being, which refers to management of health and wellness in remote working conditions (Grant, C. A., et al., 2019). The management of wellbeing remote work conditions includes being able to identify issues and having self awareness on when time-off is required to efficiently manage self health (Grant, C. A., et al., 2019). E-Well-being further correlates with other dimensions of remote work, such as work-life integration, referring to the capabilities to manage work and personal needs efficiently (Grant, C. A., et al., 2019). Additionally, E-well-being relates to being able to manage all roles – not only the role of the employee, but also parent, partner and others (Grant, C. A., et al., 2019). Lastly, the ability to set clear boundaries in the personal life and work life has been found to have a correlating effect with E-well-being as well (Grant, C. A., et al., 2019).

Wellbeing levels can vary due to different factors, such as gender, parental status, to name a few and at times have been associated to higher levels of work-life conflict (concerns from different areas disrupt each environment) (Platts K., Breckon J., Marchall E., 2022). Additionally, previous remote work experience has been identified to have a moderating effect between the relationship of remote work and employee wellbeing, with such employees having higher resilience to technostress and technology exhaustion (Singh, P., et al., 2022). Employee surveys have flagged that many remote employees experience high levels of stress and are impacted by poor psychological health management, with many employers expressing worry over the long-term negative impacts to psychological wellbeing due to the lack of social interaction among employees (Kokt, D., & Seqhobane, M., 2024). Previous studies have shown that employees provided with IT resources and are involved in decision making and that are capable of planning their work schedule and may be able to concentrate when working from home, actually showcase a statistically significant relationship between remote work benefits and psychological well-being (Kokt, D., & Seqhobane, M., 2024). Furthermore, contrary to common belief, such remote employees are even able to maintain positive relationships with both their colleagues and management, whilst balancing work and family in a satisfactory degree (Kokt, D., & Seqhobane, M., 2024).

1.5.1 Theoretical aspects of Relationship between Human Resource Development Practices and Employee Wellbeing

Human Resource Development practices have been identified in previous research to have a fundamental role in not only supporting employee engagement levels, but organisational wellbeing as well (Rumbles, S., & Rees, G., 2013). Furthermore, it has been noted that whilst wellbeing related issues can be combated through organisational training programmes, organizations have been previously found to focus such training just on health and safety topics, limiting the positive implications that a broader scope of Human Resource Development practices can have on employee wellbeing (Young and Bhaumik, and Seligman as cited by Rumbles, S., & Rees, G., 2013). Human Resource Development practitioners have been pin-pointed to bare the task of analysing wellbeing

issue sources on the organisation, department, work and per-person levels in order to highlight where development programmes are needed and how should they be structured to result positively across all the forementioned levels (Rumbles, S., & Rees, G., 2013). In relation to supporting employee wellbeing in regards to such dimensions of the phenomena, as burnout, there are several Human Resource Development intervention characteristics that can have a positive impact on successful implementation of said practices if executed successfully. Such actions include – taking employee differences and needs in regards to learning into consideration (for example, personality characteristics), addressing the level of work demands as well as already possessed skills, in regards to designing extensive and time consuming learning programmes, implementing behavioural change tactics in order to address issues at the organisational level, etc. (Rumbles, S., & Rees, G., 2013).

In the context of digital organisations, technological tools fostering employee development and supporting their wellbeing levels in parallel have been found to be of significance as well (McLean, G. N., & González Ortiz de Zárate, A., 2024). Furthermore, to enable employees to use such tools as AI and other emerging digital tools that can be supplementary in regards to organisational wellbeing, Human Resource Development practitioners have a crucial role in upskilling employees and supporting reskilling of the workforce (McLean, G. N., & González Ortiz de Zárate, A., 2024). Additionally, in regards to managing potential crisis scenarios, such as the previous occurrence of a global pandemic, Human Resource Development specifically, has been identified to have a crucial role in maintaining employee wellbeing (Alketbi, A. H. S. B., et al., 2022).

Furthermore, recent research has highlighted the importance of learning practices to be sustainable for the employees in regards to supporting employee wellbeing (Lemmetty, S., & Collin, K., 2020). In this regard, learning and development programmes made available to the employees of the organisation are one of the resources in their possession that support the reduction of workload implications and that thereof supplements the individual wellbeing of the workforce (Lemmetty, S., & Collin, K., 2020). Additionally, sustainable Human Resource Development practices have been identified in previous research to reduce employee perception of burden in relation to learning and development as well (Lemmetty, S., & Collin, K., 2020). Lastly, learning practices require to be structured and clear in order to support handling workloads and not result in negative implications to employee wellbeing instead (Lemmetty, S., & Collin, K., 2020), thus further confirming Human Resource Development practices to be a complex dimension that is relative to be observed and evaluated in relation to their impact on employee wellbeing.

1.5.2. Theoretical aspects of Relationship between Human Resource Development Practices and Employee Wellbeing with Digital Leadership Competencies as the Moderator

Although organisations have identified wellbeing to be a fundamental requirement of the workforce, insufficient training has been found to result in lacking outcomes (Rumbles, S., & Rees, G., 2013). Furthermore, Human Resource Development practitioners and managers have been pondered to have a need for a collaborative role in regards to successful implementation of learning programmes that support wellbeing, as well as Human Resource Development programme and intervention design needing to be aligned with both employee and their manager characteristics and skill levels (Rumbles, S., & Rees, G., 2013). Additionally, in regards to managing crisis scenarios, Human Resource Development professionals handle the task of effectively supplementing leadership competencies in relation to compassionate management that supports employee wellbeing (Alketbi, A. H. S. B., et al., 2022). This is especially relevant taking previous experiences, such as the global pandemic and the sudden shift towards digital organizations into account. Thus, whilst Human Resource Development functions have been found to have a direct impact on employees in relation to crisis management and their perceived wellbeing, leadership competency level was identified to have a moderating role on the relationship (Alketbi, A. H. S. B., et al., 2022). Taking into account that the forementioned research was in the context of the pandemic, the skills in question are specifically digital.

Furthermore, through development of emotional intelligence in the workforce and the leaders that support the relationship through moderation, employees are then enabled to support their own wellbeing through higher capacity to observe own feelings, improved ability to handle complicated issues, higher level of proactiveness in regards to conflict resolution and improved ability to regulate emotions, which then also results in more cohesive teams (Reilly, P. J., 2023). Furthermore, in regards to digital competencies and the digital organization context, through development of such capabilities, both employees and managers are thus more likely to be open to technological changes as well as have a higher capacity towards unpredictable issues that they may come across as well as a higher level of openness to developing new work skills and techniques as well as participating in further learnings (Reilly, P. J., 2023). In addition to this, leaders act as role models and inspirations to employees (Reilly, P. J., 2023), which can have significance in fostering both successful learning and development as well as wellbeing practices.

In regards to digital learning, researchers have noted that it isn't generally motivated through intrinsic dimensions, but rather through supportive manager practices that are key influencers of the success of said learning and development practices (Fu, F., Zha, W., & Zhou, Q., 2023). Digital leaders that possess digital communication and feedback handling skills and are also able to handle digital learning tools made available to them are thus able to provide such crucial resources to foster employee digital development (Fu, F., Zha, W., & Zhou, Q., 2023). As managers have the key role of handling employee workloads, they are also crucial in making room in employee schedules through implementing a flexible digital work environment to allow them to participate in the learning programmes set up by Human Resource Development professionals (Fu, F., Zha, W., & Zhou, Q., 2023). In regards to developing the workforce in order to adapt it to digital transformations, managers must be digitally competent enough to be able to establish and adapt

digital tools that would foster employee learning effectiveness and would thus result in more sustainable work practice (Fu, F., Zha, W., & Zhou, Q., 2023) that would in line correlate with higher levels of wellbeing. Previous research has also noted the importance of adapting learnings to employee knowledge levels, in line with which digital leaders are in need to be able to support this through adapting targeted management practices using digital tools (Fu, F., Zha, W., & Zhou, Q., 2023). Previous research has concluded that both organisational learning and digital leadership capabilities work in combination and are thus able to reduce negative implications of the digital work environments on employee wellbeing and also act as buffers to work related exhaustion (Alkhayyal, S., & Bajaba, S., 2024).

Additionally, capable leaders handle the task of acting as guides as well as observing employee work life balance and burnout levels as well as the employee workloads (Reilly, P. J., 2023), which Human Resource Development practitioners can then take into account when designing or improving learning programmes intended to support the aforementioned dimensions. Furthermore, managers have been found to lack in understanding of the importance of their role and interventions in regards to supporting emotionally intelligent organisational cultures that then support employee wellbeing (Reilly, P. J., 2023). In this regard, managers have also been found to deploy counterproductive practices, such as micromanagement, demeaning behaviours, lacking in presence and thus creating senses of disconnectedness and isolation (Reilly, P. J., 2023), which thereafter negatively affect employee wellbeing. Thus, in regards to successful Human Resource Development practice implementation, leadership capabilities have a significant moderating role that is in need to be observed and evaluated in order to successfully support employee wellbeing.

1.5.3. Theoretical aspects of Relationship between Remote Work Conditions and Employee Wellbeing with Digital Leadership Competencies as the Moderator

Digital leadership has been previously identified as an essential job resource for managing the recently emerged concept of technological fatigue in remote working conditions (Alkhayyal, S., & Bajaba, S., 2024). Research of remote work during the COVID-19 pandemic has showed that employees receiving lower levels of managerial support were 2.5 times more likely to experience loneliness, as compared to those reporting having high levels of managerial support (Lyzwinski, L. N., 2024). Perceived organizational support has been heavily linked to positive wellbeing outcomes in previous research (Kokt, D., & Seqhobane, M., 2024) with managers being at the forefront of fostering such perceptions. However, managers still have limited experience with the remote working structure (Hopkins, J., & Bardoel, A., 2023), resulting in inefficiencies and decreases in such indicators as employee wellbeing. Frequency of communication on the topic of mental health in particular from the managers has been previously linked to how comfortable employees themselves feel about opening up about the topic in relation to workplace wellbeing (Bailey, K., et al., 2023). In relation to this, employees have pointed out some other beneficial practices of their digital leaders, such as making time to discuss concerns and issues (Bailey, K., et al., 2023). With the shift towards remote work, managers have also noticed an improvement in employee wellbeing, due to such

characteristics of the remote work model as flexibility and more quiet surroundings (as compared to the office) (Korkeakunnas, T., et al., 2023). Forementioned research highlights managers specifically to be responsible for employee wellbeing as they are the company’s most crucial practice promoters (Korkeakunnas, T., et al., 2023). Furthermore, it has been suggested that with a lack of specialized digital leadership training, the manager behaviours may actually harm employee wellbeing if handled incorrectly (Alkhayyal, S., & Bajaba, S., 2024).

Research has inferred that there is necessity for managers to provide sufficient focus on employee mental health, work-life balance, familial content, emotional resilience and personal development to assure not only employee wellbeing, but workplace well-being as well (Pradhan, R. K., & Hati, L., 2022). Digital leadership has been identified to have a moderating effect on the impact of technologically induced distress on employee well-being (Alkhayyal, S., & Bajaba, S., 2024). Furthermore, digital leadership competencies have been found to have role on ensuring employee work-life balance (Alkhayyal, S., & Bajaba, S., 2024). Digital leadership competencies have been found to be especially critical during difficult times (Alkhayyal, S., & Bajaba, S., 2024). Research has shown that digital leadership capabilities moderate the negative impact of work exhaustion to employee well-being (Alkhayyal, S., & Bajaba, S., 2024).

In line with the challenges posed by the remote working conditions on employee wellbeing, practitioners have outlined some actions that managers should take in order to counteract these effects. Such as, maintaining a fair distance, ensuring right infrastructure, establishing daily connectivity, providing options for communication, creating opportunities for social communication and improving work resources (Raišienė, A., et al., 2023). On the other hand, insufficient communication, problematic dynamics and added level of pressure have been proven to have a negative impact on the various components of employee wellbeing in the workplace (Raišienė, A. G., et al.,). Other manager initiatives, identified to have positive effect on employee wellbeing are virtual exercise classes, challenges, virtual hobby teams and lunches (Hopkins, J., & Bardoel, A., 2023). All of the above are required to come as an initiative from the managers, not the employees, furthermore, highlighting the moderating role of the leaders in the cause effect relationship between the remote work conditions and employee wellbeing.

Table 1.

Studies that are related to the problem of the thesis

Year	Author	Name	The study determined
2024	Lyzwinski, L. N.	Organizational and occupational health issues with working remotely during the pandemic: a scoping review of remote work and health.	The main setbacks associated with remote work included feelings of isolation and loneliness, which negatively influenced well-being. Social support from management and contact with colleagues have

			mitigated the issue. Work-life balance was affected in some workers who struggled with heavier workloads or also had family duties.
2023	Robak, E.	The well-being of employees and working relations in remote working – opinions of Generation Z.	Respondents positively perceived the impact of remote working on employee well-being - in terms of comfort, experience of autonomy, and stress - but also in terms of maintaining work-life balance.
2023	Kukytė, A.	Managers' strategies to support employee well-being in remote work environment.	Both manager strategies and external factors impact wellbeing in remote work environments.
2023	Raišienė, A. G., Danauskė, E., Kavaliauskienė, K., & Gudžinskienė, V.	Occupational Stress-Induced Consequences to Employees in the Context of Teleworking from Home: A Preliminary Study.	Organization care level for wellbeing of teleworkers was insufficient.
2013	Rumbles, S., & Rees, G.	Continuous changes, organizational burnout and the implications for HRD.	HRD has a significant role in improving employee engagement and employee wellbeing through various interventions and support for managers, who have been found to be inactive in relation to supporting employees with low levels of perceived wellbeing.
2023	Fu, F., Zha, W., & Zhou, Q.	The Impact of Enterprise Digital Capability on Employee Sustainable Performance: From the Perspective of Employee Learning.	Communication feedback capabilities possesses by managers strengthens the relationship between organisation digital learning capabilities in the context of digital transformations and

			employee sustainable performance.
2024	Alkhayyal, S., & Bajaba, S.	Countering technostress in virtual work environments: The role of work-based learning and digital leadership in enhancing employee well-being.	Organisational learning and leader digital capabilities are able to reduce employee exhaustion related to telework.
2023	Bailey, K., Scheutzow, J., Cooke, E., Taylor, K., Silvestrin, F., Naumenko, A., Hadley, R., Huxley, A., Ponzio, S., & Hutchinson, G.	Employees' support strategies for mental wellbeing during and beyond the COVID-19 pandemic: Recommendations for employers in the UK workforce.	In the context of remote work, manager strategies aimed to support employees make a significant contribution to their mental wellbeing and foster relationships that encourage employees to speak-up regarding wellbeing related issues.
2020	Lemmetty, S., & Collin, K.	Throwaway knowledge, useful skills or a source for wellbeing? Outlining sustainability of workplace learning situations.	Depending on the quality of formal learning and technological skill development programmes in the organisations, said practices can have a negative or positive impact on sustainable workplace learning and employee perceived wellbeing.
2024	McLean, G. N., & González Ortiz de Zárate, A.	Revolutionizing HRD through digitalization.	Through adaptation of AI and digital tools in relation to HRD employee engagement, work-life balance as well as wellbeing can be affected positively.

1.6. Relationship between Human Resource Development Practices and Employee Wellbeing and the Moderating Impact of Digital Leadership Competencies and the Mediating Impact of Remote Work Conditions

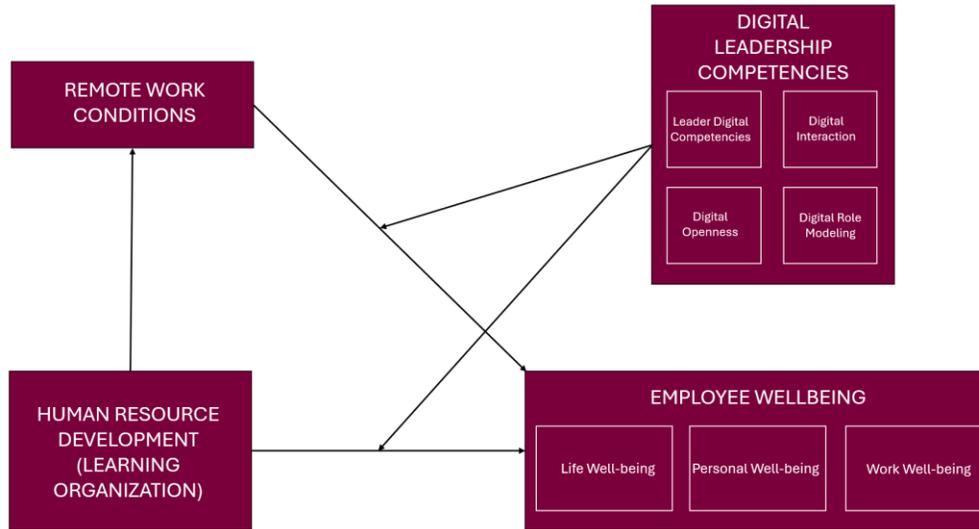
Based on the reviewed literature, there is an evident shift towards remote work in modern organizations that has been found to result in both negative and positive implications and thus the conditions of remote work must be observed and adjusted in order to support employee wellbeing. Organisational wellbeing in accordance to reviewed literature is also identified as a key human need that if fostered accordingly can result in various benefits on an individual, organisational and a broader societal level. Notably, wellbeing has been observed to be affected by the various negative implications of remote work, such as isolation and work-life balance issues, among others. However, by providing sufficient organisational support the negative effects of digital workplaces on wellbeing have been found to be buffered. Such support can be provided by the digital leaders as well as HR. In regards to the digitalization of companies that has been analysed in recent literature, managers have been identified to bear a key role in supporting employee wellbeing and acting as digital role models. However, the concept of digital leadership and the related competencies is still in the maturity stage of its development and leaders have often been found to be lacking in the aforementioned competencies and have been observed in recent literature to have low levels of awareness of the negative impact that their competency level and leadership style may have on the workforce. Additionally, the reviewed literature highlights the importance of HR having a collaborative relationship with the organisation leaders. HR in this regard is identified to have a key role in developing both employees and leaders in a way that is supportive of their wellbeing. This has been identified to be especially challenging and under-analysed in regards to Virtual Human Resource Development. In accordance to the reviewed literature remote work, digital leadership, human resource development and employee wellbeing are all key concepts for organisations that are all still fairly new and in need of further attention.

Although previous research has observed the moderating role of digital leadership competencies in regards to the relationship between remote work conditions and employee wellbeing, most literature on the topic was released during the COVID-19 pandemic or were focused on the topic of transitioning to telework and crisis management. However, in recent years we have observed the voluntary shift towards remote work, thus looking into the employee experience taking the forementioned trend into account would be of interest. Additionally, the previous study results in relation to employee wellbeing experiences, would have been also skewed by other implications of the pandemics context (for example, other family members working and studying from home full-time, isolation after work, family and personal life issues, etc.). Furthermore, with the emersion of new digital tools, including AI, a re-evaluation of remote work conditions and manager competencies in adapting to the technological changes and the impact on employee wellbeing are also of interest to be observed.

Additionally, there is a gap in research effectively connecting Human Resource Development practice impact on employee wellbeing, with most research having been conducted in the earlier 2010s' or with recent research not placing focus on the particular relationship. Also, the research does not take into consideration the remote work context, which implies complexities in relation to digital training as well as difficulties in relation to the manager role and the need for

additional competencies to be adapted by leaders. Furthermore, in recent years there has been an emergence of new aforementioned digital tools that would also presumably have implications on the Human Resource Development programme effectiveness and the employee experience in relation to their perceived wellbeing. In regards to the reviewed literature, no studies observing the forementioned relationships in parallel were found. In relation to this, the following study will analyse the following relationships in parallel:

Image 5.



Reference: created by author based on reviewed literature

2. RESEARCH METHODOLOGY OF THE IMPACT OF HUMAN RESOURCE DEVELOPMENT PRACTICES ON EMPLOYEE WELLBEING WITH DIGITAL LEADERSHIP COMPETENCIES AS THE MODERATOR AND REMOTE WORK CONDITIONS AS THE MEDIATOR

As per the literature review, there have been several academic studies that establish the relationship between human resource development practices, employee wellbeing, digital leadership competencies and remote work conditions, as described in the literature analysis section of this paper. However, previous literature did not observe the mediating role of remote work conditions in regards to the relationship between HRD and employee wellbeing. What is more, the moderating role of digital leadership competencies in regards to said relationship has not been previously analysed. Additionally, majority of previous studies were conducted during the pandemic or right after the pandemic, therefore re-evaluating the relationships in the current organisational context can be found relevant as well.

2.1. Aim, objectives, and hypothesis of the research

The aim of the research - To evaluate the relationship between Human Resource Development practices and employee wellbeing taking into account the moderating role of digital leadership competencies and the mediating role of remote work conditions.

The objectives of the Master thesis:

1. To determine the influence of human resource development practices of an organization on employee wellbeing.
2. To evaluate the impact of human resource development practices of an organization on remote work conditions.
3. To determine the impact of remote work conditions on employee wellbeing.
4. To evaluate the moderating effect of digital leadership competencies in the relationship between remote work conditions and employee wellbeing.
5. To determine the moderating effect of digital leadership competencies in the relationship between human resource development practices and employee wellbeing.
6. To evaluate the mediating effect of remote work conditions in the relationship between human resource development practices and employee wellbeing.

In order to complete empirical research, a quantitative method via anonymous survey will be applied. Data will be collected by surveying voluntary respondents of the questionnaire (Annex 1) consisting of 51 questions. The target population is employees currently working remotely either fully or partially.

Based on previous research, learning and human resource development programmes support the reduction of workload implications and that thereof supplements the individual wellbeing of the workforce (Lemmetty, S., & Collin, K., 2020). However, poorly structured or unclear learning incentives have been found to have negative implications to employee wellbeing instead (Lemmetty, S., & Collin, K., 2020). Therefore, it can be deduced that a well structure, high quality HRD system would have a positive impact on employee wellbeing.

As per conducted literature review it was determined that employees provided with IT resources and suitable remote work conditions that allow to concentrate when working from home, actually showcase a statistically significant relationship between remote work benefits and psychological well-being (Kokt, D., & Seqhobane, M., 2024). Taking this into account, it can be presumed that remote work conditions moderate employee wellbeing levels.

In regards to the reviewed literature, managers lacking in digital leadership competencies, deploying counterproductive practices such as micromanagement, demanding behaviours and lacking presence have been found to create a sense of disconnectedness and isolation amongst employees (Reilly, P. J., 2023), which then negatively impacts employee wellbeing. Digital Leadership

Competencies specifically are especially relevant taking the remote work context into account. On the other hand, digitally competent leaders handle the task of acting as guides as well as observing employee work life balance and burnout levels as well as the employee workloads (Reilly, P. J., 2023), which then supports employee wellbeing. Therefore, it can be assumed that in the remote work context, high levels of digital leadership competencies would positively affect perceived employee wellbeing.

As identified in existing academic literature, positive digital leadership practices (such as maintaining a fair distance, ensuring right infrastructure, establishing daily connectivity, providing options for communication, creating opportunities for social communication and improving work resources) support employee wellbeing (Raišienė, A., et al., 2023). Whereas negative digital leadership practices (such as insufficient communication, problematic dynamics and added level of pressure) have been proven to have a negative impact on the various components of employee wellbeing in the workplace (Raišienė, A. G., et al.,). Considering this, it can be presumed that digital leadership competency levels would reduce the negative implications of remote work conditions or the lacking quality of said conditions.

The literature review did not yield relevant results in regards to examining the moderating role of digital leadership competencies in regards to the relationship between human resource development practices and employee wellbeing. Nor did any relevant studies were found to disclose the mediating effect of remote work conditions on the relationship between human resource development practices and employee wellbeing. However, some research confirmed the relationship between variables individually. Additionally, the concept of digital leadership is not considered to be in its maturity stage yet and is shifting the paradigm of management at a fast pace (Tigre, F. B., Curado, C., & Henriques, P. L., 2023) and therefore is a topical construct to be observed. Furthermore, the reviewed literature confirms that with hybrid and remote work models being more widely adapted, understanding the attributes of such places and analysing the workforce and leadership to identify methods to supporting said workforce is essential for organizational success (Kukytė, A., 2023). In regards to this, academic literature also highlights wellbeing as a key human need with observable impact on the organizational level resulting in benefits for the workforce and organizations (Catană, Ș.-A., et al., 2022).

2.2. The empirical model of the research

Following the literature review an empirical model had been generated which this empirical study will be carried out based on. Through quantitative research, the mediating effect of remote work conditions on the relationship human resource development practices and employee wellbeing when digital leadership competencies is a moderator will be investigated.

In order to test the empirical model, several hypotheses have been formulated:

The hypothesis of the research:

Based on the reviewed literature, Human Resource Development practices have been identified in to have a fundamental role in not only supporting employee engagement levels, but

organisational wellbeing as well (Rumbles, S., & Rees, G., 2013). Furthermore, recent research has highlighted the importance of learning practices to be sustainable for the employees in regards to supporting employee wellbeing (Lemmetty, S., & Collin, K., 2020). In this regard, learning and human resource development programmes made available to the employees of the organisation are one of the resources in their possession that support the reduction of workload implications and that thereof supplements the individual wellbeing of the workforce (Lemmetty, S., & Collin, K., 2020).

Hypothesis 1 (H1) – human resource development practices of an organization positively relate to employee wellbeing.

Reviewed literature indicates that Human Resource Development practices support leaders in handling the task of acting as guides as well as observing employee work life balance and burnout levels as well as the employee workloads (Reilly, P. J., 2023), which is especially relevant in remote work environments. McWhorter (2023) additionally identifies Virtual Human Resource Development practices specifically as a crucial component supporting remote employees. Furthermore, employee surveys have flagged that many remote employees are impacted by poor psychological health management, with many employers expressing worry over the long-term negative impacts to psychological wellbeing in remote work environments (Kokt, D., & Seqhobane, M., 2024). Previous studies have shown that employees provided with sufficient resources showcase a statistically significant relationship between remote work benefits and psychological well-being (Kokt, D., & Seqhobane, M., 2024).

Hypothesis 2 (H2) – human resource development practices of an organization positively relate to remote work conditions.

Previous research pinpoints management of wellbeing remote work conditions includes being able to identify issues and having self awareness on when time-off is required to efficiently manage self health (Grant, C. A., et al., 2019). E-Well-being further correlates with other dimensions of remote work, such as work-life integration, referring to the capabilities to manage work and personal needs efficiently (Grant, C. A., et al., 2019). Additionally, the ability to set clear boundaries in the personal life and work life has been found to have a correlating effect with E-well-being as well (Grant, C. A., et al., 2019). Previous studies have shown that employees provided with IT resources and are involved in decision making and that are capable of planning their work schedule and may be able to concentrate when working from home, actually showcase a statistically significant relationship between remote work benefits and psychological well-being (Kokt, D., & Seqhobane, M., 2024).

Hypothesis 3 (H3) – remote work conditions positively relate to employee wellbeing.

Digital leadership has been identified in reviewed literature as an essential job resource for managing the recently emerged concept of technological fatigue in remote working conditions (Alkhayyal, S., & Bajaba, S., 2024). Research of remote work during the COVID-19 pandemic has

showed that employees receiving lower levels of managerial support were 2.5 times more likely to experience loneliness, as compared to those reporting having high levels of managerial support (Lyzwinski, L. N., 2024). Perceived organizational support has been heavily linked to positive wellbeing outcomes in previous research (Kokt, D., & Seqhobane, M., 2024) with managers being at the forefront of fostering such perceptions. Furthermore, it has been suggested that with a lack of specialized digital leadership training, the manager behaviours may actually harm employee wellbeing if handled incorrectly (Alkhayyal, S., & Bajaba, S., 2024). Digital leadership has been identified to have a moderating effect on the impact of technologically induced distress on employee well-being (Alkhayyal, S., & Bajaba, S., 2024). Furthermore, digital leadership competencies have been found to have role on ensuring employee work-life balance (Alkhayyal, S., & Bajaba, S., 2024).

Hypothesis 4 (H4) – digital leadership competencies moderate the relationship between remote work conditions and employee wellbeing.

Based on reviewed literature, whilst Human Resource Development functions have been found to have a direct impact on employees in relation to crisis management and their perceived wellbeing, leadership competency level was identified to have a moderating role on the relationship (Alketbi, A. H. S. B., et al., 2022). Furthermore, through human resource development practices targeted at emotional intelligence in the workforce and the leaders that support the relationship through moderation, employees are then enabled to support their own wellbeing through higher capacity to observe own feelings, improved ability to handle complicated issues, higher level of proactiveness in regards to conflict resolution and improved ability to regulate emotions, which then also results in more cohesive teams (Reilly, P. J., 2023). Furthermore, in regards to digital competencies and the digital organization context, through human resource development practices targeted at such capabilities, both employees and managers are thus more likely to be open to technological changes as well as have a higher capacity towards unpredictable issues that they may come across as well as a higher level of openness to developing new work skills and techniques as well as participating in further learnings (Reilly, P. J., 2023).

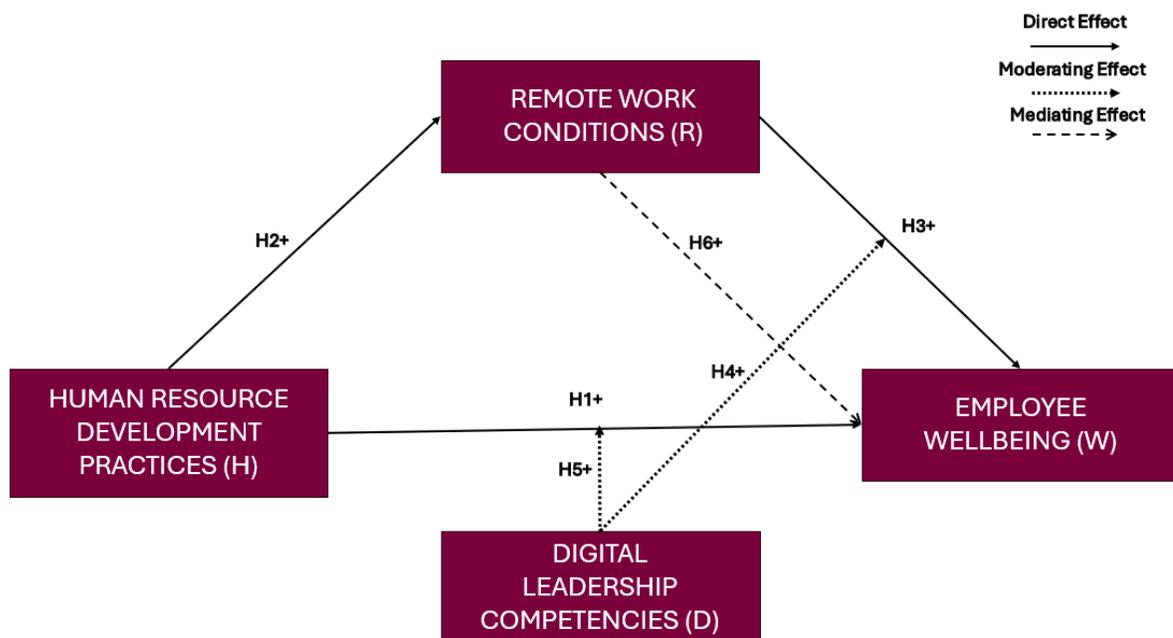
Hypothesis 5 (H5) – digital leadership competencies moderate the relationship between human resource development practices and employee wellbeing.

Previous studies have shown that employees provided with IT resources and are involved in decision making and that are capable of planning their work schedule and may be able to concentrate when working from home, actually showcase a statistically significant relationship between remote work benefits and psychological well-being (Kokt, D., & Seqhobane, M., 2024). Additionally, through human resource development practices targeted at specific capabilities, both employees and managers are found to have a higher capacity towards unpredictable issues that they may come across as well as a higher level of openness to developing new work skills and techniques as well as participating in further learnings (Reilly, P. J., 2023).

Hypothesis 6 (H6) – remote work conditions mediate the relationship between human resource development practices and employee wellbeing.

Image 6.

The Empirical Model of Relationship between Human Resource Development, Remote Work Conditions, Employee Wellbeing and Digital Leadership Competencies based on Reviewed Literature



Reference: Created by author based on academic literature and empirical research

Stages of the research:

- 1) The first stage of the research is a literature review that specifies the most important concepts, dimensions, and other important aspects of remote work, human resource development practices, employee wellbeing and digital leadership competencies. Literature analysis also reviews previous studies where connections between the variables mentioned above are established.
- 2) The second step of the study is quantitative research. Relevant data will be collected through anonymous surveys shared online (in website www.apklausa.lt as well as shared through LinkedIn and other social platforms). The survey consists of 51 questions.

- 3) The third step of the study is research data analysis, during which the data collected during the second step will be processed using a statistical analysis program – SPSS.

2.3. The structure of the questionnaire, a sample of respondents, and methods of data analysis

The structure of the questionnaire: during the quantitative research, a structured questionnaire based on 4 validated questionnaires will be used to evaluate the relationship between human resource development practices and employee wellbeing with remote work conditions as the mediator and digital leadership competencies as the moderator (see table 2).

Table 2.

The structure of the research questionnaire

Questionnaire	Authors	Name	Nr. of statements
Remote Work Conditions	Mura, A. L., Ariccio, S., Villani, T., Bonaiuto, F., & Bonaiuto, M.	Perceived Remote Workplace Environment Quality Indicators	15
Employee wellbeing	Zheng, X., Zhu, W., Zhao, H., & Zhang, C.	Employee wellbeing in organizations	6
Digital Leadership Competencies	Op 't Roodt et al.	Leader Digital Competence	9
Human Resource Development Practices	Leufvén, M., Vitrakoti, R., Bergström, A., Ashish, K. C., & Målqvist, M.	Dimensions of Learning Organizations	21

Reference: Created by author based on authors listed in the above table

To measure remote work conditions, A. L. Mura et al. Perceived Remote Workplace Environment Quality Indicators Scale consisting of 15 questions will be used. The statements will be evaluated on a Likertscale from 1 (Strongly Disagree) to 5 (Strongly Agree). The examples can be found below:

- The room where I work is quiet enough.
- I am satisfied with the lighting in this room.
- The furnishings in this room are in good condition.

- In this room, I can move safely.
- In this workstation, I have all the equipment necessary for the work activity at hand.

The employee wellbeing in organizations scale developed by Zheng et al. will be used to evaluate the wellbeing levels of the employees. The full scale consists of 18 statements, but for the purposes of this study, 6 questions focusing specifically on work wellbeing will be used. Not the full scale will be used in order to prevent overlaps with the other scales. Additionally, the research focuses on work wellbeing, not general wellbeing, therefore only the 6 statements on work wellbeing are relative and aligned with the research topic. Furthermore, not the full scale has been used by other researchers as well. The statements will be evaluated on a Likert scale from 1 (Strongly Disagree) to 7 (Strongly Agree). Examples can be found below:

- I am satisfied with my work responsibilities.
- I find real enjoyment in my work.
- Work is a meaningful experience for me.

Digital Leadership Competencies will be evaluated using the Leader Digital Competence scale by Op 't Roodt et al. which will be evaluated on a Likert scale from 1 (Almost Never) to 6 (Almost Always). Examples of statements:

- Even when my leader is not personally present, he/she is able to lead the team via digital tools.
- My leader promotes openness to technical innovations
- My leader helps me use digital media in an appropriate way (e.g., by establishing rules for the use of email, arrangements regarding availability times, etc.)

Human Resource Development practices of organizations were measured using Dimensions of Learning Organizations scale by Leufvén, M. et. al. The dimensions were measured on a Likert scale from 1 (Completely Disagree) to 6 (Completely Agree). Statement examples below:

- In my organization, people are rewarded for learning.
- In my organization, people give open and honest feedback to each other.

- In my organization, teams/groups have the freedom to adapt their goals as needed.
- My organization measures the results of the time and resources spent on training.
- My organization gives people control over the resources they need to accomplish their work.
- My organization works together with the outside community to meet mutual needs.
- In my organization, leaders ensure that the organization's actions are consistent with its values.

The survey will be anonymous, however, the information will be collected about respondents' gender, age, position, seniority, and size of the company.

Methods of data analysis: Quantitative analysis was performed by using SPSS Statistics program. Data was analyzed by using frequency tables. To check questionnaire reliability Cronbach alpha was used. When testing data normality Kolmogorov Smirnov and Shapiro-Wilk tests were employed. When investigating relationships between variables linear regression and Spearman correlation were used. To test if mean ranks differ significantly between groups Mann Whitney U test was used. To test for mediation and moderation “Process” macro within SPSS was used. In the statistical tests 5% confidence level was applied.

The sample of respondents: For the research, the sample size of respondents was determined using statistical requirements, with a 5% margin of error. The calculation involved multiplying the number of questions in the research questionnaire which consists of 51 questions, by a factor of 5 (Costello, A. B., & Osborne, J., 2005). Therefore, the study requires surveying 255 respondents who are working at least partially remotely and 200 responses were collected. A cross-tabulations method will be used in order to search for the possible correlations within the selected sample.

Reliability of the questionnaire: Questionnaires created by researchers were selected to measure remote work conditions, human resource development practices, employee wellbeing and digital leadership competencies. In order to check and evaluate the reliability of the questionnaires, Cronbach's alpha coefficients will be calculated based on answers from 255 respondents surveyed. Additionally, the questionnaires have

been validated and deployed in other academic research.

3. RESEARCH RESULTS

A quantitative research - anonymous respondent survey was conducted using the online survey platform apklausa.lt. The survey was launched in September 2025, and responses from participants were gathered until December 2025. There were 200 respondents surveyed in total. The participants were chosen through a convenient sampling that was non-probabilistic. The questionnaire was shared among Lithuanian employees within the LinkedIn platform at other social platforms and groups in Facebook and Reddit. Participants were aware of the study's objectives and received guarantees of the confidentiality and anonymity of the research results.

3.1. Demographic and working characteristics of the respondents

During the survey, the respondents were asked to answer the questions about their demographic and working characteristics. They were requested to provide their gender, age, level of education, position and work experience in their current organization. They were also requested to specify the industry the organization they are currently working in operates in. The results of the respondents in regard to the demographic and working characteristics is provided in Table 3.

Table 3

Demographic characteristics of the respondents

Question	Options	Number of Answers	Number of Answers (%)
Gender	Male	97	48,5%
	Female	101	50,5%
	Nonbinary	2	1%
Age	19-31	102	51%
	32-44	83	41,5%
	45-67	15	7,5%

Reference: Created by author based on conducted research

The split based on gender in the respondents is almost equal, with only 4 more female respondents having answered the survey. When it comes to age, the majority of the respondents were ranging in age between 19 and 31 and more the 41% of the respondents being in the 32-44 age year group.

Table 4

Education and Work Characteristics of the respondents

Question	Options	Number of Answers	Number of Answers (%)
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Hours per week working remotely	1-9	40	20%
	10-19	69	34,5%
	20	10	5%
	21-39	23	11,5%
	40	25	12,5%
	41-60	33	16,5%
Level of Education	Primary	1	0,5%
	Secondary	19	9,5%
	Higher Education (Non-University)	28	14%
	Higher Education (University)	152	76%
Have Subordinates	Yes	44	22%
	No	156	78%
Work Experience	>1 year	34	17%
	2-5 years	84	42%
	6-10 years	40	40%
	10+ years	10	5%
	No answer	32	16%
Industry	Information Technology	73	76,5%
	Healthcare	3	1,5%
	Manufacturing	7	3,5%
	Finance	80	40%
	Education	9	4,5%
	Hospitality/Travel	1	0,5%
	Transportation/Logistics	6	3%
	Energy/Utilities	1	0,5%
	Construction/Engineering	2	1%
	Other	18	9%

Reference: Created by author based on conducted research

Majority of the respondent are not working remotely full time, but are working 10 to 19 hours per week remotely (34,5%). Most of the respondents have a university level education (76%), but are mostly non-managers (78%), which would impact their perception in regards to the digital leadership competency construct, when it comes to how middle-managers and non-managers would rate the questions. When it comes to experience, most of the respondents have either worked in their current organisations for 2 to 5 years (42%) or 6 to 10 years (40%), allowing them to form a solid perception of their organisation, its policies, etc. Most of the respondents are currently working either within the IT industry (76,5%) or Finance (40%).

3.1.1. Descriptive statistics of the research

For each variable normality testing using Kolmogorov Smirnov and Shapiro-Wilk tests were performed. Normality tests allowed to assess whether the data is normally distributed.

Table 5*Kolmogorov Smirnov and Shapiro-Wilk tests*

Construct	Kolmogorov Smirnov (p value)	Shapiro-Wilk (p value)	Skewness	Kurtosis
Remote Work Conditions	.044	.024	-.21	-.21
Employee Wellbeing	.000	.000	-.75	-.31
Digital Leadership Competencies	.019	.001	-.23	-.59
Human Resource Development Practices	.000	.000	-.54	-.20

Reference: Created by author based on conducted research

We can see that in all instances the p-values (“Sig”) are lower than 0.05 and that indicates that all variables according to both tests are not normally distributed and that has to be taken into account. Therefore, Skewness and Kurtosis were also evaluated to see if none of the values are too peaked or too flat. Based on these two values, we can see that none of the variables breach the 1 or -1 thresholds and therefore can be considered close to normal distribution and used in further analysis. Firstly, relationship analysis between demographical factors and the constructs was performed. Since the data is lacking in regards to distribution normality, non-parametric Mann Whitney U test was used to compare the averages between the genders.

Table 6*Mann Whitney U test*

Construct	Gender	Mean	p value
Remote Work Conditions	Male	90.64	0.033
	Female	108.00	
Employee Wellbeing	Male	93.22	0.130
	Female	105.53	
Digital Leadership Competencies	Male	98.65	0.837
	Female	100.32	
Human Resource Development Practices	Male	95.20	0.300
	Female	103.63	

Reference: Created by author based on conducted research

From the above table we can see that employee wellbeing, digital leadership competencies and human resource development practices do not differ statistically significantly between genders. However, we can see that females are statistically significantly more satisfied with their remote work conditions than males (p=0.033).

To evaluate the relationships between age, education levels and the constructs, Spearman correlation coefficient was used.

Table 7*Spearman correlation coefficient*

		Remote Work Conditions	Employee Wellbeing	Digital Leadership Competencies	Human Resource Development Practices
Age	Correlation Coefficient	.042	.140	-.051	-.088
Education	Correlation Coefficient	.001	.109	-.031	.098

Reference: Created by author based on conducted research

Based on the Correlation Coefficient, age statistically significantly correlates with employee wellbeing, as age increases, employee wellbeing increases as well ($\rho=0.140$, $p < 0.05$). No other statistically significant correlations were detected.

In regards to the demographical factors, gender has been found to be statistically significant only in regards to remote working conditions, indicating that women are more satisfied with their remote work conditions. Also, age has been found to be statistically significant only in relation to employee wellbeing, indicating that as age increases, employee wellbeing increases as well.

3.2. Human resource development practices of an organization positively relate to employee wellbeing

Firstly, linear regression analysis was performed to evaluate the dependent variable of employee wellbeing with the independent variable – human resource development practices to check if the independent variable is statistically significant and is in line with the hypothesis.

Table 8*H1 verification*

ANOVA (dependent variable – employee wellbeing)					
	Sum of Squares	df	Mean Square	F	Sig
Regression	11.266	1	11.266	9.607	.002 (predictor/constant – human resource development)
Residual	232.179	198	1.173		
Total	243.444	199			
Coefficients					
	B	Std. Error	Beta	t	Sig
Human Resource	.214	.069	.215	3.100	.002

Development Practices					
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Reference: Created by author based on conducted research

Linear regression analysis ANOVA F is 9.607, $p < 0.05$. That means that data is suitable for regression analysis. Also, we can see that human resource development practices effect on employee wellbeing is positive and statistically significant ($\beta = 0.214$, $p\text{-value} < 0.05$). Additionally, model R-squared is 0.046, meaning that the independent variable explains 4.6% of the dependent variables variability.

3.2.1. Human resource development practices of an organization positively relate to remote work conditions

In regards to the second hypothesis, linear regression analysis was performed to evaluate the dependent variable of remote work conditions with the independent variable – human resource development practices to check if the independent variable is statistically significant and is in line with the hypothesis.

Table 9

H2 verification

ANOVA (dependent variable – employee wellbeing)					
	Sum of Squares	df	Mean Square	F	Sig
Regression	.615	1	.615	1.710	.193 (predictor/constant – human resource development)
Residual	71.207	198	.360		
Total	71.822	199			
Coefficients					
	B	Std. Error	Beta	t	Sig
Human Resource Development Practices	.050	.038	.093	1.308	.193

Reference: Created by author based on conducted research

Linear regression analysis ANOVA F is 1.710, $p > 0.05$. That means that independent variable will probably be insignificant. From the table above we can see that human resource development practices effect on remote work conditions is positive and statistically insignificant ($\beta = 0.050$, $p\text{-value} = 0.193$). Also model R-squared is 0.009. That means independent variable explains 0.9% of dependent variable variability. Therefore, Hypothesis 2 is rejected.

3.2.2. Remote work conditions positively relate to employee wellbeing

In regards to the third hypothesis, linear regression analysis was performed to evaluate the dependent variable of employee wellbeing with the independent variable – remote work conditions to check if the independent variable is statistically significant and is in line with the hypothesis.

Table 10

H3 verification

ANOVA (dependent variable – employee wellbeing)					
	Sum of Squares	df	Mean Square	F	Sig
Regression	33.483	1	33.483	31.576	.000 (predictor/constant – remote work conditions)
Residual	209.961	198	1.060		
Total	243.444	199			
Coefficients					
	B	Std. Error	Beta	t	Sig
Human Resource Development Practices	.683	.122	.371	5.619	.000

Reference: Created by author based on conducted research

Linear regression analysis ANOVA F is 31.576, $p < 0.05$. That means that data is suitable for regression analysis. From the table above we can see that remote work conditions effect on employee wellbeing is positive and statistically significant ($\beta = 0.683$, $p\text{-value} < 0.05$). Also model R-squared is 0.138. That means the independent variable explains 13.8% of dependent variable variability. Therefore, Hypothesis 3 is accepted.

3.2.3. Digital leadership competencies moderate the relationship between remote work conditions and employee wellbeing

When it comes to the fourth hypothesis, the independent variable is remote work conditions (X) and the dependent variable is employee wellbeing (Y) with digital leadership competencies (W) as the moderator.

Table 11

H4 verification

Moderator and independent variable effect	Moderator effect
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R2	F	P	$\Delta R2$	F	p
0.428	14.630	p<0.05	0.001	0.215	0.644

Model	Coefficient	Std. error	t	p	95% LCI	95% UCI
Constant	3.167	2.220	1.427	0.155	-1.210	7.545
Remote Work Conditions	0.226	0.586	0.386	0.700	-0.930	1.382

Reference: Created by author based on conducted research

Based on determination coefficient, which is 0.428, we can state, that model explains 42.8% dependent variable. Based on “R_W_C x D_L_C” coefficient and its p-value ($\beta=-0.059$, $p=0.644$) and R-squared change and its p-value ($\Delta R2=0.001$ and $p=0.644$) we can make conclusion that digital leadership competencies does not moderate relationship between remote work conditions and employee wellbeing. Therefore, hypothesis 4 is rejected.

3.2.4. Digital leadership competencies moderate the relationship between human resource development practices and employee wellbeing

Concerning the fifth hypothesis, the independent variable is human resource development practices (X), dependent variable is employee wellbeing (Y) and moderator is digital leadership competencies (W).

Table 12

H5 verification

Moderator and independent variable effect			Moderator effect		
R2	F	P	$\Delta R2$	F	p
0.429	14.705	p<0.05	0.024	5.809	0.017

Model	Coefficient	Std. error	t	p	95% LCI	95% UCI
Constant	0.299	1.117	0.267	0.789	-1.905	2.502

Model	Coefficient	Std. error	t	p	95% LCI	95% UCI
Human Resource Development Practices	0.861	0.288	2.993	0.003	0.294	1.429
Digital Leadership Competencies	0.924	0.232	3.980	p<0.05	0.466	1.383
Human Resource Development Practices x Digital Leadership Competencies	-0.143	0.059	-2.410	0.017	-0.260	-0.026

Reference: Created by author based on conducted research

Based on determination coefficient, which is 0.429, we can state, that model explains 42.9% dependent variable. Based on “Human Resource Development Practices x Digital Leadership Competencies” coefficient and its p-value ($\beta=-0.143$, $p=0.017$) and R-squared change and its p-value ($\Delta R^2=0.024$ and $p=0.017$) we can make conclusion that digital leadership competencies moderates the relationship between human resource development practices and employee wellbeing. Thus, H5 is accepted.

3.2.5. Remote work conditions mediate the relationship between human resource development practices and employee wellbeing

Concerning the last hypothesis, the independent variable is human resource development practices (X), dependent variable is employee wellbeing (Y) and mediator is remote work conditions (M).

Table 13

H6 verification

General X effect on Y						
Coefficient	Std. error	t	p	95% LCI	95% UCI	
0.214	0.069	3.100	0.002	0.078	0.350	
Direct X effect on Y						
Coefficient	Std. error	t	p	95% LCI	95% UCI	
0.181	0.065	2.798	0.006	0.054	0.309	

Indirect X effect on Y				
Coefficient	Std. error		95% LCI	95% UCI
0.033	0.028		-0.020	0.091

Reference: Created by author based on conducted research

General X effect on Y is statistically significant 0.214 ($p < 0.05$). Further in the table direct and indirect effects are present. Direct effect is statistically significant, because $p < 0.05$. Indirect effect is statistically insignificant, because confidence interval range covers zero. Thus, we can make conclusion that remote work conditions do not mediate relationship between human resource development practices and employee wellbeing. Therefore, H6 is rejected.

4. RESULT DISCUSSION

As per the literature review, there have been several academic studies that establish the relationship between human resource development practices, employee wellbeing, digital leadership competencies and remote work conditions, as described in the literature analysis section of this paper. However, previous literature did not observe the mediating role of remote work conditions in regards to the relationship between HRD and employee wellbeing. What is more, the moderating role of digital leadership competencies in regards to said relationship has not been previously analysed. Additionally, majority of previous studies were conducted during the pandemic or right after the pandemic, therefore re-evaluating the relationships in the current organisational context can be found relevant as well. The results of the empirical analysis provided clear evidence regarding the relationships between human resource development practices, remote work conditions, digital leadership competencies, and employee wellbeing.

Firstly, the analysis of relationships between constructs and demographic factors showed that gender differences were statistically significant only in relation to remote work conditions. Female employees reported significantly higher satisfaction with remote work conditions than male employees. However, no statistically significant gender differences were found in regards to employee wellbeing, digital leadership competencies, or human resource development practices. Furthermore, age was positively and significantly related to employee wellbeing, indicating that as employees' age increases, their level of wellbeing also increases. No statistically significant relationships were found between education level and any of the analyzed constructs.

Regression analysis results confirmed that human resource development practices have a positive and statistically significant effect on employee wellbeing, supporting Hypothesis 1 (H1).

This indicates that as the level of human resource development practices increases, employee wellbeing also increases. These results are aligned with the findings of previous research, that has showcased that HRD practices when properly implemented, result in higher employee wellbeing levels and therefore resilience in relation to task execution (Han, S. J., & Stieha, V., 2020). In contrast, human resource development practices did not have a statistically significant effect on remote work conditions, leading to the rejection of Hypothesis 2 (H2). Thus, improvements in human resource development practices do not necessarily result in better perceived remote work conditions.

The analysis further demonstrated that remote work conditions have a strong, positive, and statistically significant effect on employee wellbeing, confirming Hypothesis 3 (H3). This finding indicates that as remote work conditions improve, employee wellbeing increases accordingly. Among all direct effects tested, remote work conditions explained the largest proportion of variance in employee wellbeing. This is also aligned with previous research, that has found that remote work often results in work-life conflicts, which not only negatively affects wellbeing through a lack of boundaries, but also affects work behaviours in a negative way as well and results in delays in task completion, mistakes and inefficient communication amongst others (Nemţeanu, M.-S., & Dabija, D.-C., 2023). Furthermore, previous research had also found that negative impacts of remote work also are linked to the various dimensions of wellbeing (Ribeiro, J., da Silva, F. P., & Vieira, P. R., 2024) and this includes physical wellbeing in relation to the physical remote working conditions as well. Hence, remote work condition improvement is essential concerning employee wellbeing support.

Moderation analysis revealed mixed results. Digital leadership competencies did not moderate the relationship between remote work conditions and employee wellbeing, resulting in the rejection of Hypothesis 4 (H4). This suggests that the effect of remote work conditions on wellbeing remains stable regardless of the level of digital leadership competencies. However, digital leadership competencies were found to significantly moderate the relationship between human resource development practices and employee wellbeing, leading to the acceptance of Hypothesis 5 (H5). Specifically, the interaction effect indicates that as digital leadership competencies increase, the positive effect of human resource development practices on employee wellbeing becomes weaker, suggesting a compensatory or substitution effect between these two factors. Although previous research has observed the moderating role of digital leadership competencies in regards to

the relationship between remote work conditions and employee wellbeing, most literature on the topic was released during the COVID-19 pandemic or were focused on the topic of transitioning to telework and crisis management. Additionally, the previous study results in relation to employee wellbeing experiences, would have been also skewed by other implications of the pandemics context (for example, other family members working and studying from home full-time, isolation after work, family and personal life issues, etc.). However, the following study has also confirmed the moderating effect as digital leadership competencies were found to significantly moderate the relationship between human resource development practices and employee wellbeing.

Finally, mediation analysis showed that remote work conditions do not mediate the relationship between human resource development practices and employee wellbeing, as the indirect effect was statistically insignificant. Therefore, Hypothesis 6 (H6) was rejected. This indicates that human resource development practices influence employee wellbeing primarily through a direct pathway rather than indirectly via remote work conditions.

In summary, remote work conditions are not significantly influenced by human resource development practices, and digital leadership competencies play a moderating role only in the relationship between human resource development practices and employee wellbeing. However, the empirical findings demonstrate that employee wellbeing increases with higher levels of human resource development practices, better remote work conditions, and greater employee age. These results highlight the importance of directly investing in both employee development and remote work quality in order to effectively support employee wellbeing, while also recognizing the nuanced role of digital leadership in shaping employee wellbeing outcomes.

Limitations of the study

While interpreting the results of the study, attention should be paid to the several potential limitations that are important to be acknowledged. Here are some realistic limitations that could be considered:

The sample size was relatively small and had some lacking diversity concerning some of the demographical criteria and therefore a bigger respondent scope would potentially yield different results concerning some of the hypothesis. Additionally, the respondents were not all working

remotely full time and therefore the results may differ if the same study would be conducted focusing only on employees that work remotely full time.

Furthermore, concerning employee wellbeing and digital leadership competency constructs, the answers may have been impacted by the timing of data collection, which would also have implications for the results. For example, emotions at a particular moment may fluctuate over time.

Lastly, when responding to questions concerning wellbeing, human resource development and digital leadership competencies, respondents may provide answers that they think are socially acceptable or preferred and may impact the reliability of the collected data, even though anonymity had been guaranteed.

CONCLUSIONS

1. As per the literature review, there have been several academic studies that establish the relationship between human resource development practices, employee wellbeing, digital leadership competencies and remote work conditions, as described in the literature analysis section of this paper. However, previous literature did not observe the mediating role of remote work conditions in regard to the relationship between HRD and employee wellbeing.
2. Based on the reviewed literature, Human Resource Development practices have been identified in to have a fundamental role in not only supporting employee engagement levels, but organisational wellbeing as well. Reviewed literature indicated that Human Resource Development practices support leaders in handling the task of acting as guides as well as observing employee work life balance and burnout levels as well as the employee workloads. Reviewed studies have showed that when employees are provided with IT resources and are capable of planning their work schedule as well as are able to concentrate when working from home, actually showcased a statistically significant relationship between remote work benefits and psychological well-being. Also, digital leadership has been identified in reviewed literature as an essential job resource for managing the recently emerged concept of technological fatigue in remote working conditions. Based on the reviewed literature, whilst Human Resource Development functions have been found to have a direct impact on employees in relation to crisis management and their perceived wellbeing, leadership competency level was identified to have a moderating role on the relationship. Additionally, through human resource development practices targeted at specific capabilities, both employees and managers were previously found to have a higher capacity towards unpredictable issues that they may come across as well as a higher level of openness to developing new work skills and techniques as well as participating in further learnings.
3. The empirical findings demonstrate that remote work conditions are not significantly influenced by human resource development practices, and digital leadership competencies play a moderating role only in the relationship between human resource development

practices and employee wellbeing. However, the empirical findings demonstrate that employee wellbeing increases with higher levels of human resource development practices, better remote work conditions, and greater employee age. These results highlight the importance of directly investing in both employee development and remote work quality in order to effectively support employee wellbeing, while also recognizing the nuanced role of digital leadership in shaping employee wellbeing outcomes.

RECOMMENDATIONS

1. The research findings indicate that HRD practices positively impact employee wellbeing. Therefore, organisations should prioritise investing time and resources into structured, research-based HRD initiatives. This not only includes structured learnings, but career planning and other initiatives that are respectively catered to the employee individual needs. However, HRD practices did not indicate a positive influence onto the remote work experience and therefore the aim of the practices should not be focused towards improving the remote work experience.
2. Remote work conditions were identified to have a significant impact on employee wellbeing, thus organisations should place improving remote work conditions as one of the key priorities for employee experience improvement. In relation to the conducted research, this would include both the accessibility of relevant tools, but also physical conditions assured in the remote working place. As a result, if certain employees do not have suitable remote working environments, alternative conditions would be recommended to be evaluated. Also, taking into account that female employees were found to have a higher level of satisfaction in their remote working conditions than male employees, it would be relevant for organisations to take a more personalised approach in order to accommodate individual employee needs.
3. Taking into account the positive association between age and employee wellbeing suggests that younger employees may require additional support from organisations in order to accommodate their needs. Thus, organisations should consider individualised interventions for junior employees, such as mentorship or buddy programs as well as better structured onboarding process and supporting material (with a focus towards wellbeing practices available in the organisation). These initiatives may help mitigate the challenges younger employees face in remote work settings.
4. The research results indicate that digital leadership competencies do not moderate the relationship between remote work conditions and employee wellbeing. This suggests that improving digital leadership alone is insufficient to combat the challenges of remote work environments. Organizations should therefore adopt a balanced approach: while developing digital leadership remains important, it should not replace systematic HRD efforts. Instead, leaders should be trained to complement HRD initiatives by fostering digital trust, clarity, and support, which aligns with the sentiments of existing research.
5. Research did not confirm the mediating role of remote work conditions in relation to the relationship between HRD practices and employee wellbeing. Hence, organisations should take this into account and place focus towards more personalised and dynamic interventions in regards to the challenges faced by remote employees.

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THE IMPACT OF HUMAN RESOURCE DEVELOPMENT PRACTICES ON EMPLOYEE WELLBEING WITH DIGITAL LEADERSHIP COMPETENCIES AS THE MODERATOR AND REMOTE WORK CONDITIONS AS THE MEDIATOR

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Master's Thesis

Human Resource Development program

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Vilnius, 2025

SUMMARY

Aim of the study - To evaluate the relationship between Human Resource Development practices and employee wellbeing taking into account the moderating role of digital leadership competencies and the mediating role of remote work conditions.

This study examined the interrelationships among human resource development (HRD) practices, remote work conditions, digital leadership competencies, and employee wellbeing. Through a targeted survey, it was identified that human resource development practices have a positive and statistically significant effect on employee wellbeing. Furthermore, it was identified that the level of human resource development practices increases, employee wellbeing also increases. In contrast, human resource development practices did not have a statistically significant effect on remote work conditions. Additionally, it was revealed that remote work conditions have a strong, positive, and statistically significant effect on employee wellbeing. Also, the study found that digital leadership competencies did not moderate the relationship between remote work conditions and employee wellbeing. However, digital leadership competencies were found to significantly moderate the relationship between human resource development practices and employee wellbeing. Lastly, mediation analysis showed that remote work conditions do not mediate the relationship between human resource development practices and employee wellbeing, as the indirect effect was statistically insignificant.

**ŽMOGIŠKŲJŲ IŠTEKLIŲ VYSTYMO PRAKTIKŲ POVEIKIS DARBUOTOJŲ
GEROVEI, MODERUOJANT SKAITMENINĖS LYDERYSTĖS KOMPETENCIJOMS IR
MEDIJUOJANT NUOTOLINIO DARBO SĄLYGOMS**

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SANTRAUKA

Tyrimo tikslas – įvertinti žmogiškųjų išteklių plėtros praktikų ir darbuotojų gerovės santykį, atsižvelgiant į skaitmeninio lyderystės kompetencijų moderuojantį vaidmenį ir nuotolinio darbo sąlygų tarpininkaujantį vaidmenį.

Šiame tyrime buvo nagrinėjami žmogiškųjų išteklių plėtros (ŽIP) praktikos, nuotolinio darbo sąlygų, skaitmeninio lyderystės kompetencijų ir darbuotojų gerovės tarpusavio ryšiai. Atlikus tikslinę apklausą, buvo nustatyta, kad žmogiškųjų išteklių plėtros praktika turi teigiamą ir statistiškai reikšmingą poveikį darbuotojų gerovei. Be to, buvo nustatyta, kad didėjant žmogiškųjų išteklių plėtros praktikos lygiui, didėja ir darbuotojų gerovė. Tuo tarpu žmogiškųjų išteklių plėtros praktika neturėjo statistiškai reikšmingo poveikio nuotolinio darbo sąlygoms. Be to, buvo nustatyta, kad nuotolinio darbo sąlygos turi stiprų, teigiamą ir statistiškai reikšmingą poveikį darbuotojų gerovei. Taip pat tyrime nustatyta, kad skaitmeninio lyderystės kompetencijos neturėjo įtakos nuotolinio darbo sąlygų ir darbuotojų gerovės santykiui. Tačiau buvo nustatyta, kad skaitmeninio lyderystės kompetencijos turėjo reikšmingą įtaką žmogiškųjų išteklių plėtros praktikos ir darbuotojų gerovės santykiui. Galiausiai, tarpininkavimo analizė parodė, kad nuotolinio darbo sąlygos neturi įtakos žmogiškųjų išteklių plėtros praktikos ir darbuotojų gerovės santykiui, nes netiesioginis poveikis buvo statistiškai nereikšmingas.

ANNEXES

Annex 1. Example of the survey

SURVEY

Dear Respondent, I am a student of Vilnius University's Human Resources Management Master's degree program. You are invited to participate in a survey, the purpose of which is to evaluate the relationship between Human Resource Development and employee wellbeing taking into account the moderating role of digital leadership competencies and the mediating role of remote work conditions. You are kindly asked to please answer the questions below. The survey is anonymous and the filling process will take up to 15 minutes.

How often do you work remotely?

- I work fully remotely
- (Around) 3 days per week
- (Around) 2 days per week
- (Around) 1 day per week

The statements below reflect remote work conditions. Based on your personal opinion, choose an answer to each statement about your current workplace.

Nr.	Please choose the statement that corresponds to your opinion the most	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1.	The room where I work is quiet enough.	1	2	3	4	5
2.	In this room, noises can be heard from other areas of the house/environment.	1	2	3	4	5
3.	In this room, I can hear noises coming from outside.	1	2	3	4	5
4.	That workstation is well-lit during the day.	1	2	3	4	5
5.	I am satisfied with the lighting in this room.	1	2	3	4	5
6.	In this room during the day, there is enough natural light.	1	2	3	4	5
7.	The furniture in this room is well-made.	1	2	3	4	5
8.	The surfaces of the furnishings of the workstation are well-made and resistant to wear.	1	2	3	4	5

9.	The furnishings in this room are in good condition.	1	2	3	4	5
10.	In this room, I can move safely.	1	2	3	4	5
11.	In this room, I can move without bumping into anything.	1	2	3	4	5
12.	I can move freely in this room.	1	2	3	4	5
13.	In this workstation, I have all the equipment necessary for the work activity at hand.	1	2	3	4	5
14.	I am satisfied with the equipment I have available in this workstation for my work activity.	1	2	3	4	5
15.	In this workstation, I can carry out my work activity comfortably.	1	2	3	4	5

The statements below reflect organisational wellbeing. Based on your personal opinion, choose an answer to each statement about your current workplace.

Nr.	Please choose the statement that corresponds to your opinion the most	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1.	I am satisfied with my work responsibilities	1	2	3	4	5	6	7
2.	In general, I feel fairly satisfied with my present job	1	2	3	4	5	6	7
3.	I find real enjoyment in my work	1	2	3	4	5	6	7
4.	I can always find ways to enrich my work	1	2	3	4	5	6	7
5.	Work is a meaningful experience for me	1	2	3	4	5	6	7
6.	I feel basically satisfied with my work	1	2	3	4	5	6	7

achievements in my current job								
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The statements below reflect digital competencies of management. Based on your personal opinion, choose an answer to each statement about your current workplace.

Nr.	Please choose the statement that corresponds to your opinion the most	Almost Never	Never	Sometimes	Often	Always	Almost Always
1.	My leader uses digital media for communicating with his/her employees in an appropriate way.	1	2	3	4	5	6
2.	Even when my leader is not personally present, he/she is able to lead the team via digital media.	1	2	3	4	5	6
3.	My leader knows which digital medium (e.g., telephone, e-mail, chat) is most appropriate in which situation.	1	2	3	4	5	6
4.	All in all, digital communication with my leader works well.	1	2	3	4	5	6
5.	My leader shows openness to new technologies.	1	2	3	4	5	6
6.	My leader reacts with enthusiasm when presented with technical innovations.	1	2	3	4	5	6
7.	My leader promotes openness to technical innovations.	1	2	3	4	5	6
8.	My leader is a role model for me regarding the use of digital media.	1	2	3	4	5	6
9.	My leader helps me use digital media in an appropriate way (e.g., by establishing rules for the use of email, arrangements regarding availability times, etc.)	1	2	3	4	5	6

The statements below reflect on human resource development in the organization. Based on your personal opinion, choose an answer to each statement about your current workplace.

Nr.	Please choose the statement that corresponds to your opinion the most	Completely Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Completely Disagree
1.	In my organization, people help each other learn	1	2	3	4	5	6
2.	In my organization, people are given time to support learning.	1	2	3	4	5	6
3.	In my organization, people are rewarded for learning.	1	2	3	4	5	6
4.	In my organization, people give open and honest feedback to each other.	1	2	3	4	5	6
5.	In my organization, whenever people state their view, they also ask what others think.	1	2	3	4	5	6
6.	In my organization, people spend time building trust with each other.	1	2	3	4	5	6
7.	In my organization, teams/groups have the freedom to adapt their goals as needed.	1	2	3	4	5	6

8.	In my organization, teams/groups revise their thinking as a result of group discussions or information collected.	1	2	3	4	5	6
9.	In my organization, teams/groups are confident that the organization will act as their recommendations.	1	2	3	4	5	6
10.	My organization creates systems to measure gaps between current and expected performance.	1	2	3	4	5	6
11.	My organization makes its lessons learned available to all employees.	1	2	3	4	5	6
12.	My organization measures the results of the time and resources spent on training.	1	2	3	4	5	6
13.	My organization recognizes people for taking initiatives.	1	2	3	4	5	6
14.	My organization gives people control over the resources they need to accomplish their work.	1	2	3	4	5	6
15.	My organization supports employees who	1	2	3	4	5	6

	take calculated risks.						
16.	My organization encourages people to think from a global perspective.	1	2	3	4	5	6
17.	My organization works together with the outside community to meet mutual needs.	1	2	3	4	5	6
18.	My organization encourages people to get answers from across the organization when solving problems.	1	2	3	4	5	6
19.	In my organization, leaders mentor and coach those they lead.	1	2	3	4	5	6
20.	In my organization, leaders continually look for opportunities to learn.	1	2	3	4	5	6
21.	In my organization, leaders ensure that the organization's actions are consistent.	1	2	3	4	5	6

Your Gender:

- a) Male
- b) Female
- c) Nonbinary

Your Age:

- a) Input

What is your level of education?

- Primary
- Secondary
- Professional
- Higher Education (Non-university)
- Higher Education (University)

Do you have subordinates?

- Yes
- No

What is your work experience in your current organization?

- Input

What is the size of the company you currently work at?

- Very small company (1-9 employees)
- Small company (10-49 employees)
- Medium company (50-249 employees)
- Large company (250 and more employees)

What industry does your organization operate in?

- Information Technology
- Healthcare
- Manufacturing
- Finance
- Education
- Hospitality/Travel
- Transportation/Logistics
- Energy/Utilities
- Construction/Engineering
- Other

Annex 2. SPSS Analysis

Reliability analysis		
Construct	Cronbach's Alpha	N of Items

Remote Work Conditions (R_W_C)	.901	15
Employee wellbeing (E_W)	.919	6
Digital Leadership Competencies (D_L_C)	.934	9
Human Resource Development Practices (H_R_D_P)	.978	21

	R_W_C	E_W	D_L_C	H_R_D_P
Mean	3.89	5.28	4.41	3.98
Median	3.90	5.33	4.50	4.00
Std. Deviation	.60	1.11	.95	1.11
Skewness	-.21	-.75	-.23	-.54
Kurtosis	-.21	.31	-.59	-.20
Minimum	2.00	1.67	2.00	1.00
Maximum	5.00	7.00	6.00	6.00

Tests of Normality						
	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
R_W_C	.064	200	.044	.984	200	.024
E_W	.115	200	.000	.949	200	.000
D_L_C	.070	200	.019	.972	200	.001
H_R_D_P	.094	200	.000	.964	200	.000

	Gender	N	Mean Rank	Sum of Ranks	Statistics	p-value
R_W_C	Male	97	90.64	8792.50	4039.50	0.033

	Female	101	108.00	10908.50		
E_W	Male	97	93.22	9042.50	4289.50	0.130
	Female	101	105.53	10658.50		
D_L_C	Male	97	98.65	9569.00	4816.00	0.837
	Female	101	100.32	10132.00		
H_R_D_P	Male	97	95.20	9234.00	4481.00	0.300
	Female	101	103.63	10467.00		

		R_W_C	E_W	D_L_C	H_R_D_P
Age	Correlation Coefficient	.042	.140	-.051	-.088
	Sig. (2-tailed)	.552	.048	.470	.216
Education	Correlation Coefficient	.001	.109	-.031	.098
	Sig. (2-tailed)	.993	.124	.660	.169

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.266	1	11.266	9.607	.002b
	Residual	232.179	198	1.173		
	Total	243.444	199			
a. Dependent Variable: E_W						
b. Predictors: (Constant), H_R_D_P						

Coefficients ^a	
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Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.433	.285		15.555	.000
	H_R_D_P	.214	.069	.215	3.100	.002

a. Dependent Variable: E_W

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.215a	.046	.041	1.08288

a. Predictors: (Constant), H_R_D_P

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.615	1	.615	1.710	.193b
	Residual	71.207	198	.360		
	Total	71.822	199			

a. Dependent Variable: R_W_C

b. Predictors: (Constant), H_R_D_P

Coefficients ^a				
Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta		
1	(Constant)	3.686	.158		23.359	.000
	H_R_D_P	.050	.038	.093	1.308	.193

a. Dependent Variable: R_W_C

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.093a	.009	.004	.59969

a. Predictors: (Constant), H_R_D_P

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.483	1	33.483	31.576	.000b
	Residual	209.961	198	1.060		
	Total	243.444	199			

a. Dependent Variable: E_W

b. Predictors: (Constant), R_W_C

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.631	.478		5.508	.000
	R_W_C	.683	.122	.371	5.619	.000

a. Dependent Variable: E_W

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.371a	.138	.133	1.02976
a. Predictors: (Constant), R_W_C				