



The Future of Public Human Resources Post Covid19: Challenges and Opportunities

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Abstract

The impact of the Covid-19 pandemic has reverberated through the world and South Africa is no exception. Within the South African context, the impact was severe even in the public sector since most of the South African population rely heavily on public services such as health. During the hard lockdown (level 5) government employees were required to limit their face-to-face interaction with the public in the provision of such services and migrate most of these onto online platforms. This migration was more of reaction than pro-action and thus resulted in most of these services experiencing teething problems, the public raising their voice of dissatisfaction and staff members experiencing low morale owing to these challenges. The crisis has had public organisations to develop, adapt or improve remote work policies and procedures. Public managers struggled to keep employees safe and informed, failed to answer questions like what changes will be more permanent, how will they guide employees and organisational leadership through these changes, what is the technology and communications infrastructure needed for successful remote work and at what is this available to employees? Despite these challenges, opportunities abound in the new-normal and this could create a new culture within the public service of high productivity, accountability and performance management. This article presents a review of the recent literature on public resources management relation in the impact of Covid-19 on public organisations. It sets out to explore the extent to which this literature has responded to impact and how public organisations have responded to the pandemic.

Keywords: *Covid-19; Paradigm Shift; Public Human Resources; Information; Technology*

Introduction

COVID-19 has impacted and shaken all organisations, creating a complex and challenging environment for public managers. Public organisations needed to find innovative and non-traditional solutions to ensure the continuity of public organisations and to help public employees to cope with the pandemic and provide public services during these extraordinary times. Research studies on the impact of the virus on public human resources are very small if not non-existent.

Recovering from the effects of the virus and trying to stimulate economic full activity, the President announced the end of the lockdown period (Disaster Management Act, 2022), public entities have now fully reopened. The rules and a new functioning were of physical distancing in the workplace, wearing of masks, frequent washing or sanitising of hands, remote working, vaccination, and booster shots required a speedy paradigm shift from the employers and employees alike (Shaw, Main, Findley, Collie, Kristman, & Gross, 2020). These adjustments were put in place as stop-gap measures since no one could predict when the pandemic will end and whether these measures will become permanent features of public human resources practices.

Thus, the pandemic has obviously led to the emergence of a complex and challenging environment for public managers who needed to find ingenious solutions to sustain government business and to assist employees to cope with the challenges of this unprecedented situation. Unfortunately, there are very few studies on the impact of COVID-19 on public human resources, its challenges, and its potential opportunities for public organisations. Public managers needed relevant information that will help them to go through this crisis effectively and efficiently, to be able to support employees and to sustain government's business in providing public services. Due to the nature and the speed of how this pandemic occurred, many, if not all, public organisations were not sufficiently prepared to deal with the crisis when it occurred (Wang, Hutchins, & Garavan, 2009). Hence the importance, for the scientific community, to support public organisations by providing relevant information related to the impact of this pandemic on public human resources. Therefore, the principal goal of this research is to investigate the impact of COVID-19 on public human resources, to identify the main challenges and opportunities, and to provide insights into future directions in the management of public human resources.

Methodology

The research study has adopted the qualitative research design through the use of Systematic literature review (SLR) to respond to the research question in a manner that is clear and precise. Systematic literature review is a process that identifies, selects and critically appraises research and the work of scholars and researchers in order to answer the clearly formulated research question. The main purpose of this system is to produce results that are not ambiguous and biased that could be caused by other research methods, objects and sample selection. The Covid-19 pandemic has raised many debates across the world due to its disruption on business, the economy and social life.

The aim of the study is to explore the impact of Covid-19 on the human resources using a systematic literature review and provide recommendations on the human resource and organisations on the future practices towards an effective human resource in the world of work. The approach used through the systematic literature review was followed by the steps of: research questions identification, research identification, literature search, selection review, data extraction, data synthesis and review writing. To seek validity and reliability of data finding the main method that was used was the critical data evaluation. This paper adopted the systematic literature review to explore the future public human resources post Covid-19. The articles used in this paper were extracted from University of Limpopo Library online search engines such as Google scholar, EbsCohost, Emerald and Sabinet databases which are widely used in literature review and recognised as academic databases which provide literature regarding businesses, management and the economy.

Theoretical Framework

Government or public entities are generally known to be monolithic in nature and very slow to adapt to or implement change, more so when the required change is externally influenced. The pandemic has become to be known as the game changer in forcing change in organisations including the public

sector. Pettigrew (1985) and Pettigrew et al. (2001), as cited by Kuipers et al (2014), identified four factors when studying change in public sector organisations, i.e., context, content, process and outcomes when studying change. These factors help in identifying the specific characteristics related to the change processes and the implementation thereof in public organisations:

- Context refers to the organisation's external and internal environments, such as a changing political environment or the institutionalisation of a public organisation (Philippidou et al. 2008).
- Content focuses on the content of the change, including the organisation's strategies, structures and systems (Armenakis and Bedeian 1999).
- Process focuses on describing Third, mention the process factor, which describes the interventions and processes that are involved in the implementation of change. Generally, both the management and public administration literature distinguish between radical and emergent change processes, in this instance both radical and evolutionary change was or will be experienced, in this instance both paradigms were or will be experienced Armenakis and Bedeian (1999).
- Criterion variables, referring to the outcomes of change, including the attitudes, behaviour and experiences of those involved with the change. An additional factor that needs to be included in this change framework is the leadership of change Armenakis and Bedeian(1999). Leadership plays a vital in driving the process of change and its implementation.

The Change Management Theory, as underpinned by the Theory of Change, is relevant to measure and implement the necessary changes as brought about by the pandemic. Change in government entities is necessary, and by default on public human resources, owing to the pandemic, is necessary but could be challenging to implement and protect the gains derived from it. The combination of these theories looks at change not only from the literal aspect of change such as process but also the abstract nature of change from the behavioural side of public human resources.

Literature Review

Lund, Madgavkar, Manyika, Smit, Ellingrud and Robinson (2021), argue that the future of HR has been affected extremely by the COVID-19 pandemic as it gave rise to organisations working remotely. To achieve the government's goal and vision of public human resources, viz. to provide public services for the upliftment of the general population, public organisations need to plan to shift to flexible workspaces after positive experiences with working remotely during the pandemic. Schwartz, Hatfield, Jones and Anderson (2019), refers to the future of human resource (HR) as a result of many forces of change affecting three deeply connected dimensions of an organisation, namely, knowledge, action and motivation. Schultz (2021), argue that the future of human resource depends on public organisations' ability to keep up with the speed of fourth industrial revolution (4IR), as propelled by Covid-19, with the focus on innovation, productivity, agility and automation of human resource processes to remain competitive in the labour market.

Yifan, Li, Ding and Liao (2021) purports that the outbreak of COVID-19 pandemic has threatened the future of human resource as it has forced organisations to confront uncertainties and risks caused many problems for government operations. The spread of COVID-19 and its effects on public human resource management will cause many challenges in the long run. Gokhberg, Sokolov and Chulok (2017), argue that the new era of the Furth Industrial Revolution, cloud computing and development of new architectures and computing principles will lead to the transformation of softwares and as such it will cause a radical change with business strategies of company across all sectors of the economy. Wilson and Daugherty (2018), emphasise that while taking into cognisance the impact of technologies and the digitisation of operations, the work roles might be eliminated especially those that involve routine,

transactional tasks and rule-based administration while those requiring negotiation, judgement, problem-solving, relationship management and domain expertise will remain.

Dirani, Abadi, Alizadeh, Barhate, Garza, Noeline Gunasekara, Ibrahim and Majzun (2020), argue that the future of public human resources requires public leaders who are decisive in nature and are able to respond effectively towards a crisis in the organisation. Strategic public human resource development is one of the strategies that could assist managers to make sense of the situation towards responding to COVID-related issues. Chen (2021) emphasises that the future of human resource depend on the organisation's ability to manage crisis. A crisis affects organisational performance, sustainability and ultimately threatens its viability. Public managers within public institutions were worried about the COVID-19 pandemic and it required them to effectively utilise their crisis management strategies to respond to the pandemic. Crisis management in the workplaces is an effective tool to deal with emotional harm, physical injury, discrimination and any type of crisis disaster.

Orchard (2020), argue that the pandemic has had an impact emotionally and on the socio-economic aspect globally and locally, that requires public organisations to move from the traditional way of doing things to the more advanced and remote workforce arrangements. The impact of the pandemic is not short-term but it will affect public human resource development and social cohesion in the long-run. Bussin & Swart-Opperman, (2021), highlight that as much as the future of human resource is concerned about how the pandemic has impacted all aspects of life, the state of uncertainty and crisis management has placed pressure on public organisations systems, impacting the decision on its businesses and strategies as such requires public managers to balance the pressure from employees and stakeholders.

Challenges and Opportunities

The year 2020 has been severely challenging both socially and economically due to the global pandemic of Covid-19 which resulted in economic meltdown. Many businesses across the world has experienced a severe loss and reached the breaking point. This has resulted in many people losing their jobs due to retrenchments and businesses closing. However, this has not been the case with government organisations due to protective labour laws and the nature of government business. This crisis has caused fundamental challenges and implications for public human resources management practices (Cookea, Dickmann and Parry, 2020).

Azizi, Atlasi, Ziapour, Abbas and Naemi (2021), state that public human resources are the main factor within public institutions as they are the drivers of development, establishment and implementation. However, with the COVID-19 as a major health problem and it's widespread and constant mutation it has caused many challenges with organisations to be left with uncertainties, ambiguity and complexities. Chen (2021), emphasize that employees were stressed and frustrated by the situation caused by the COVID-19 as it has posed danger and uncertainty on their livelihoods. Furthermore, the pandemic caused critical challenges on public human resource policies. This required public organisations to assess the opportunities and threats in the new environment and act accordingly towards the new norm and practices.

Aguinis and Burgi-Tian, (2021), argue that the COVID-19 pandemic gave rise to many talent management challenges such as bonus cancellation, salary freezes, hiring layoffs, pay reduction and employees stress and burnout. The pandemic has made it evident that many organisations have not implemented the state-of-science performance management systems and instead have performance management appraisals that do not provide sufficient feedback on the alignment of employees' performance and public organisation's strategic goals. The reason why many organisations postpone or discontinue performance evaluations is due to lack of contribution by the usual performance evaluation and review.

According to Collingsa, McMackina, Nyberg & Wright (2021), the pandemic has changed the experiences and standards of work for many employees in the public sector. As a result of these changed many organisations were forced to adopt to the new norms and standards and the requirements of the world of work. The relationships between employees started to break between those who were able to work from home and those who could not and those who remained on the payroll versus those who were furloughed.

The pandemic had severe challenges on the relationship between the employee and employer due to the implementation of work from home that caused the boundaries of work to fade away. However, it has been observed that the COVID-19 outbreak has tempered with the performance management in many organisations as they were overwhelmed by challenges resulting from the COVID-19. The workplace isolation, family distractions, stress, miscommunication and role overload has affected employees working from home. This requires managers to understand what is required to keep momentum in the organisation given the situation caused by the pandemic (Hamouche, 2021).

At its core, COVID-19 pandemic is a human crisis. Thus, public human resource human resources leaders have been central to the response of the pandemic in organisations globally (Collins et al, 2021), including public entities. Research in human resources is often premised on a homogenous view of employees across different sectors, i.e., no differentiation between private and public sectors.

There is also an assumption that human resources practices are relatively homogenous (c.f. Huselid, 1995). However, employees differ in their experience and interpretation of human resources practices depending on their sector (Kehoe and Wright, 2013). Therefore, there needs to be differentiation between human resources practices as per sector wherein they operate, as organisations would respond as per their environment. Lepak and Snell (1999) were among the first to promote an approach that differentiates human resources practices for different employee groups, and such a differentiated approach has been the core to discussions on talent management of late (Collings et al., 2019). Collins et al (2021) also posit that COVID-19 has highlighted the importance of considering the differential impact of public human resource practices across different employee groups in terms of how and where they work.

Gollins et al (2021) are of the view that the differentiated approach challenges many assumptions underpinning traditional human resources practices. For example, it is assumed that workers are located in a physical workplace, with limited consideration of managing a virtual workforce. Where human resources flexibility has been considered, this has largely focused on human resources practices, with culture/values overlooked. Understanding how culture and organisational values influence how place of work impacts on outcomes such as individual or unit performance remain key research question that needs to be answered.

The pandemic also highlighted the importance of the public as key stakeholders in organisations (Ulrich et al., 2012). Public organisations needed to carefully manage the trade-offs between the public, employees, and their political masters. Through the pandemic employees needed to work because the public needed products or services, and governments departments also had to manage the public and employees' safety that during the pandemic came at the expense of hospitalisation, sometimes even death of some employees and/or public members, long queues, and delays due to limited staff.

Since human resources practices is about how people are employed, managed and developed in organisations' (Armstrong & Taylor, 2020: 3), it has been greatly impacted by COVID-19, generating significant challenges for human resources managers and practitioners alike. This impact of these challenges need to explored in relation to strategic human resources, working conditions, as well as functions, specifically, staffing, performance management, training and development, compensation management, safety and health management, and lastly employees' relations. Each of these human

resource function can be addressed individually, however, they are interrelated. This suggests that a change in one function will affect the other functions (Mondy & Martocchio, 2016). Therefore, a holistic approach to the management public human resources cannot be overemphasised.

Adjusted (as per the lockdown restrictions), and future public resources management practices need to be modified to account for shifts in service delivery, such as increased digitisation of service provision or reduced physical interaction in service provision, in response to COVID-19 and how these impact key customer outcomes. Research in public human resources should also consider how customer perceptions of how employees have been managed in response to COVID-19 impacts on their trust in the products and services of those public entities and how they engage with them with an aim to improve service delivery levels. In order to ensure the achievement of the organisational goals in a time of crisis, strategic agility is required (Liu, Lee, & Lee, 2020).

Public organisations need to be able to prepare and allocate resources; to coordinate the needed mechanism; and to properly use the organisational resources and knowledge (Liu, Lee, & Lee, 2020). In this context, the novelty and the complexity of the COVID-19 represent a significant challenge that might compromise the achievement of organisational goals. According to Baert, Lippens, Moens, Sterkens, and Weytjens (2020), standard operational models in public organisations are mainly trained to use data from a ‘normal times’ perspective. Thus, it is challenging to make predictions related to ‘abnormal times.’ This might suggest that making predictions related to the organisation, e.g., the preparation and the allocation of resources might be a complex exercise. In all reality, COVID-19 has generated uncertainty. Some authors go so far as to predict the COVID-19 endemic (Regmi & Lwin, 2020) whereas many economists predict the outcomes of this pandemic will remain for a foreseeable future (Akkermans, Richardson, & Kraimer, 2020). Thus, the emphasis on the adage “new normal”.

Currently, no one knows when this virus will end and if its consequences on the work patterns in organisations will be temporary or permanent (Bartik, Cullen, Glaeser, Luca, & Stanton, 2020), even after the recent development of different types of vaccines (Yu et al., 2021). Thus, performing strategic planning or implementing one can be challenging for managers and public human resource practitioners. In this case, most public organisations were not able to provide their employees with enough information about their management plan or their intended reactions toward the pandemic (Elsafty & Ragheb, 2020), whereas having clear workplace guidelines during hard times helps to reduce employees’ stress and to increase their motivation and confidence (Wong, Ho, Wong, Cheung, & Yeoh, 2020). The study by Elsafty and Ragheb (2020) showed that access to information and the update related to the pandemic is associated significantly with employees’ retention.

Working conditions represent ‘the core of paid work and employment relationships’ (ILO, 2020). They ‘cover a broad range of topics and issues, from working time (hours of work, rest periods, and work schedules) to remuneration, as well as the physical conditions and mental demands that exist in the workplace’ (ILO, 2020). The COVID-19 crisis has drastically altered working conditions in public organisations. To ensure continuity, some public organisations have moved to remote working, requiring their employees to work from home (Aitken-Fox et al., 2020a, 2020b; Gourinchas, 2020; Koirala & Acharya, 2020). However, the category of employees working from home represents a small fraction of the overall workforce (Gourinchas, 2020), mainly because remote working is not suitable for all employees in public organisations, it cannot be applied to all job positions (Bartik et al., 2020).

In this context, where the nature of the organisation’s business does not allow it to adhere to these types of working conditions, employees were required to be physically present while respecting the measures of physical distancing and wearing personal protective equipment or to work from home in the case of co-morbidities. The challenge, in this case, was to ensure the respect of these protection measures and to plan work schedules that consider employees’ context. Remote working was the overall preferred

method for most public organisations, as it was highly promoted by the government. However, there were major challenges here. Firstly, public managers needed to ensure that employees working from home have the necessary tools to perform their job (Aitken-Fox et al., 2020b; Hamouche, 2020).

Remote working requires the availability of technological tools which will facilitate communication between employees and managers, such as Zoom, Microsoft remote desktop, team viewer, and Microsoft team (Prasad & Vaidya, 2020). Secondly, to ensure for the employees working from home effective communication, supervision, support, performance management, and a realignment of their compensation (Aitken-Fox et al., 2020b). Moreover, public resource practitioners also needed to play a supportive role to public managers who are leading remote teams for the first time (Caligiuri, De Cieri, Minbaeva, Verbeke, & Zimmermann, 2020). Lastly, public managers and practitioners need to take into consideration the psychological or mental effect fact that remote working might lead to employees' isolation due to the absence of interaction between employees, lack of peer advice, and lack of one-to-one communication which can be sources of stress that might undermine employees' mental health (Prasad & Vaidya, 2020).

It can also be psychologically demanding for these employees considering the possibilities of family distractions and the multiple roles that they have to assume while working from home (Prasad & Vaidya, 2020). In addition, the increased use of information and communication technology (ICT) can lead to the perception of an everlasting urgency, generating possible expectations about the constant availability of employees (Molino et al., 2020). Working from home can lead, as well, to an increase in the volume of information treated by employees, considering that they regularly use their emails (Leonardi, 2020). Some authors refer to a technostress related to the use of ICT, which has increased among employees working remotely (Molino et al., 2020). This can undermine the psychological health of employees, especially those who isolate themselves by choosing only emails as a means of communication. Many HRM practitioners have implemented some activities to support their employees, such as creating virtual socialization activities, e.g., virtual lunch or coffee breaks (Carnevale & Hatak, 2020; Maurer, 2020).

Undoubtedly, these practices help to support employees in this tough crisis while they are far from each other, and from their workplace (Hamouche, 2020). However, they also represent a great challenge for organisations, considering that besides being applied in a context of unexpected changes, these practices are new for employees and managers, who have not been previously trained or psychologically prepared for such changes, which may lead to an increase in their perceptions of person-environment misfit and dissatisfaction if they prefer the face-to-face interactions that they used to have prior to this pandemic outbreak (Carnevale & Hatak, 2020). Moreover, virtual interactions might affect the socialisation process recognised for its importance to help employees acquire the tacit knowledge related to the organisational culture, and contributing to its development (Asatiani, Hämäläinen, Penttinen, & Rossi, 2021).

Findings and Recommendations

The future of public human resources practices need to be modified to account for shifts in public service delivery, such as increased digitisation of service provision or reduced physical interaction in service provision, in response to COVID-19 and future pandemics, and how these impact on key customer outcomes. Research in public human resources should also consider how customer perceptions of how employees have been managed in response to COVID-19 impacts on their trust in the products and services of those public entities and how they engage with them with an aim to improve service delivery levels.

As public human resources research and practices evolve towards a more strategic orientation, the conflict between the traditional employee and its incarnation as strategic business partner has become a point of tension (Prichard, 2010). Although the strategic business partner model has been core to the strategic positioning of the human resources function (Ulrich, 1996), the oversimplified implementation of this model has been critiqued as a separation of ‘thinking from doing’, and thereby creating an artificial boundary between strategic and transactional work (Reilly et al., 2007).

Strategic human resources work has become highly valued, while transactional or tactical human resources work devalued, often delegated to line managers, or concentrated in centres of excellence (Prichard, 2010). This is reflected in a shift from evaluating HR effectiveness against technical criteria established by the profession (e.g., validity) to evaluations of other stakeholders (Beer et al., 2015).

COVID-19 highlights the need to recalibrate the discussion on the tactical versus strategic role of strategic human resources. For example, how has the human resource’s function navigated tensions in their role as employee advocate and strategic business partner? Research has highlighted the positive impact of human resources’ recognised unique operational competencies, such as short-term retrenchment measures, as opposed to some perceived strategic orientation, in aiding organisations to navigate the great recession (Roche and Teague, 2012).

However, a solely operational focus cannot generate sustainable outcomes, suggesting that the most effective leaders will balance this tactical role with a strategic influence. Strategic HRM research has also been criticised for drawing on ‘narrow and classical definitions of strategy implying pre-determined consensus and a linear sequential progress from formulation through implication’ implying that HR strategy is developed as a once off structural intervention (Harney and Collings, 2021, p. 3). The pace of change during the pandemic necessitated a dynamic and fluid approach to strategy. Thus, COVID-19 provides an opportune context for research which explores the strategising process in executive leadership teams and how human resources strategy has emerged and evolved in that context.

Conclusion

The study has explored the challenges and opportunities that public human resources faced during the Covid-19 pandemic, and the resultant opportunities that could be derived from the changes brought by the pandemic. It looks at the four factors when studying change in public sector organisations, i.e., context, content, process and outcomes when studying change. These factors were used to support the argument on the future of public human resources. The paper has explored the literature from different scholars and researchers to place an argument. It has been deduced that the world of work is evolving given the impact of Covid-19 and possibly future pandemics. The impact has propelled the adoption of some elements of the Fourth Industrial Revolution. This has forced the human resources in the public sector to shift from the tradition ways of doing things to a more artificial and technology infused practices. As such the issue of adaptation has sparked anxiety, threat and uncertainties on the workforce. The authors are of a view that the future of public human resources depends not only on the government policies and strategies but also on the leadership skills of the managers in the public institutions. To implement and achieve the vision and mission of public organisations, public managers within these organisations must display leadership attributes that will assist the workforce in adjusting to the continuous changing human resource practices.

References

- Aguinis, H. & Burgi-Tian, J. 2021. Talent management challenges during COVID-19 and beyond: Performance management to the rescue. *Business Research Quarterly*, 24(3): 233-240.
- Azizi, M.R., Atlasi, R., Ziapour, A., Abbas, J. & Naemi, R. 2021. Innovative Human Resource Strategies during COVID-19: A systematic narrative review Approach. Accessed 10 April 2022 <https://doi.org/10.1016/j.heliyon.2021.e07233>.
- Bussin, M.H.R. & Swart-Opperman, C. 2021. Considering impacts to employees and the workplace. Accessed 15 May 2022 < <https://sajhrm.co.za/index.php/sajhrm/article/view/1384/2622>>.
- Chen, Z. 2021. Influence of Working From Home During the COVID-19 Crisis and HR Practitioner Response. *Frontier Psychology*, 12: 1-8.
- Collingsa, D.G., McMackina, J., Nybergb, A.J. & Wright, P.M. 2021. Strategic Human Resource Management and COVID-19: Emerging Challenges and Research Opportunities. Accessed 04 May 2022 <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8013558/>>.
- Cooke, F.L., Dickmann, M. & Parry, E. 2021. After 30 years: taking stock in times of COVID-19 and looking towards the future of HR research. *The International Journal of Human Resource Management*, 32(1):1-23.
- Dirani, K.M., Abadi, M. , Alizadeh, A. , Barhate, B. , Garza, R.C., Gunasekara, N. , Ibrahim, G. & Majzun, Z. 2020. Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic, *Human Resource Development International*. Accessed 20 April 2022 <<https://doi.org/10.1080/13678868.2020.1780078>>.
- Hamouche, S. 2021. Human resource management and the COVID-19 crisis: implications, challenges, opportunities, and future organizational directions. Accessed 28 April 2022 < <https://www.cambridge.org/core/terms>. <https://doi.org/10.1017/jmo.2021.15>>.
- Ichsan, R.N., Khaeruman, Santosa, S., Shara, Y. & Liriwati, F.Y. 2020. Investigation of strategic human resource management practices in business after covid-19 disruption. *Palarch's Journal of Archaeology of Egypt/Egyptology*, 17(7): 13098-13110.
- Lund, S., Madgavkar, A., Manyika, J., Smit, S., Ellingrud, K. & Robinson, O. 2021. The future of work after Covid-19. Accessed 28 April 2022 <<https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>>.
- Yifan, Z., Li, Y., Ding, J. & Liao, Y. 2021. Risk Management: Exploring Emerging Human Resource Issues during the COVID-19 Pandemic. *Journal of Risk and Financial Management* 14(228): 1-28.
- Schwartz, J., Hatfield, S., Jones, R., & Anderson, S. 2019. What is the future of work? Redefining work, workforces, and workplaces. Accessed 20 May 2022 <<https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/humancapital/deloitte-nl-hc-what-is-the-future-of-work.pdf>>.
- Schultz, C.M. 2021. The future and the role of human resource management in South Africa during the Fourth Industrial Revolution. *SA Journal of Human Resource Management/SA*, 19(0).
- Aguinis H. & Burgitian,J.(2021). Talent management challenges during COVID-19 and beyond: Performance management to the rescue. *Business Research Quarterly*, 24(3): 233-240.

- Akkermans, J., Richardson, J., & Kraimer, M. (2020). The Covid-19 crisis as a career shock: Implications for careers and vocational behavior. *Journal of vocational behavior*, 119, 1-6. doi: 10.1016/j.jvb.2020.103434.
- Aitken-Fox, E., Coffey, J., Dataram, k., Fitzgerald, S., Gupta, C., McKenna, S., & Wei Tian, A.(2020a). COVID-19 and the changing employee experience. *LSE Business Review*. Retrieved from <https://blogs.lse.ac.uk/businessreview/2020/06/24/Covid-19-and-the-changing-employee-experience/>.
- Armstrong, M., & Taylor, S. (2020). *Armstrong 's handbook of human resource management practice*. USA: Kogan Page Publishers.
- Asatiani, A., Hämmäläinen, J., Penttinen, E., & Rossi, M. (2021). Constructing continuity across the organisational culture boundary in a highly virtual work environment. *Information system journal*,31(1), 62- 93.
- Azizi, M. R., Atlasi, R., Ziapour, A., Abbas, J. & Naemi, R. 2021. Innovative Human Resource Strategies during COVID-19: A systematic narrative review approach. Accessed 10 April 2022 <https://doing.org/10.1016/j.haliyon.2021.e07233>.
- Baert, S., Lippens, L., Moens, E., Stekerns P., & Weytjens, j. (2020). How do we think COVID-19 crisis will affect our careers (if any remain)?, GLO Discussion paper, No. 520, Global Labor Organizations(GLO), Essen.
- Bartik,A. W., Cullen,Z.B.,Glasser, E.L., Luca, M., & Stanton , C.T. (2020). What jobs are being done at home during the COVID-19 crisis? Evidence from firm -level surveys (No. w27422). National Beurea of Economic Research.
- Bussin, M.H.R. & Swart- Opperman, C. 2021. Considering impacts to employees and the workplace. Accessed 15 May <<https://sajhrm.co.za/index. Php/ sajhrm/article/ view/1384/2622>>.
- Caligiuri, p.,De Cieri,H., Minbaeva, D.,Verbeke, A., & Zimmermann, A.(2020). International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. *Journal of International business studies*,51,697-713.
- Carnevale, J.B., & Hatak, L. I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183-187.
- Cooke, F.L., Dickmann, M. & Parry, E. 2021. After 30 years: taking stock in times of COVID-19 and looking towards the future of HR research. *The international Journal of Human Resource Management*,32(1):1-24.
- Dirani, K.M., Abadi, M., Alizadeh, A., Barratt B., Garza, R.C., Gunasekara, N., Ibrahim G.& Majzun, Z. 2020. Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic, *Human Resource Development International*. Accessed 20 April 2022< <https://doi.org/10.1080/13678868.2020.1780078>>.
- Elsafy,A. S., &Ragheb , M. (2020). The role of human resource management towards employee's retention during Covid-19 pandemic in medical supplies sector-Egypt. *Business and management studies*,6(2),5059-5059.
- Gourinchas, P.O. (2020). Flattening the pandemic and recession curves. Mitigating the COVID Economic Crisis:Act Fast and Do Whatever, 31, 1-227.

- Hamouche, S. (2020). COVID-19 and employees' mental health: Stressors, moderators, and agenda for organizational actions. *Emerald Open Research*, 2(15). doi: 10.35241/emeraldopenres.13550.1.
- Ichsan.R.N., Khaeruman, Santosa, S., Shara, Y. & Liriwati.F.Y. 2020. Investigation of strategic human resource management practices I'm business after Covid-19 disruption. *Palarchs's Journal of Achaeology of Egypt/Egyptology*, 17(7): 13098-13110.
- ILO., (2020). Working conditions. Retrieved from <https://www.ilo.ch/global/topics/working-conditions/lang--en/index.htm>.
- Koirala, J., & Acharya, S. (2020). Dimensions of human resource management evolved with the outbreak of COVID-19. Available at SSRN 3584092.
- Leonardo, P.M. (2020). COVID-19 and the new technologies of organizing: digital exhaust, digital footprints and artificial intelligence in the wake of remote work. *Journal of Management Studies*. <https://ideas.repec.org/a/bla/jomstd/v58y2021i1p249-253.html>.
- Liu, Y., Lee, J. M., & Lee, C. (2020). The challenges and opportunities of a global health crisis: The management and business implications of COVID-19 from an Asian perspective. *Asian Business & management*, 19, 277-297.
- Lund, S., Madgavkar, A., Manyika, J., Smit, S., Ellingrud, K., Meaner, M., & Robinson, O. (2021). The future of work after COVID-19. Retrieved from <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>.
- Maurer, R. (2020). Job interviews go virtual in response to COVID-19. Retrieved from <https://www.shrm.org/resourcesandtools/hr-topics/acquisition/pages/job-interviews-go-virtual-response-covid-19-coronavirus.aspx>.
- Mondy, R. W., & Martocchio, J. J. (2016). *Human Resource Management*. USA: Pearson.
- Molino, M., Ingusci, E., Signore, F., Maruti, A., Giancaspro, M. L., Russo.V., Cortese, C. G. (2020). Wellbeing costs of technology use during Covid-19 remote working: an investigation using the Italian translation of the technostress creator's scale. *Sustainability*. 12(15), 5911.
- Prasad. K., & Vaidya, R. W. (2020). Association among Covid-19 parameters, occupational stress, and employee performance: An empirical study with reference to agricultural research sector in Hyderabad Metro. *Sustainable Humanosphere*, 16(2), 235-253.
- Regmi, K., & Lwin. C. M. (2020). Impact of social distancing measures for preventing coronavirus disease 2019[COVID-19]: A systematic review and meta-analysis protocol. *medRxiv*.doi:10.1101/2020.06.13.20130294.
- Schwartz, J., Hatfield, S., Jones, R., & Anderson, S. 2019. What is the future of work? Redefining work, workforces, and workplaces. Accessed 20 May 2022<
<https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/humancapital/deloitte-nl-hc-what-is-the-future-of-work.pdf>>.
- Schultz, C.M. 2021. The future and the role of human resource management in South Africa during the Fourth Industrial Revolution. *SA journal of Human Resource Management/SA*,19(0).



- Shaw, W. S., Main, C. J., Findley, P. A., Colin, A., Kristian. V.L., & Gross, D. P. (2020). Opening the workplace after COVID-19: What lessons can be learned from return-to-work research? *Journal of Occupational Rehabilitation*, 30, 299-302.
- Wang, J., Hutchins, H. M., & Garavan, T.N. (2009). Exploring the strategic role of human resource development in organizational crisis management. *Human Resource Development Review*, 8(1), 22-53.
- Wong, E., Ho, K., Wong, S., Cheung, A., & Yeoh, E. (2020). Workplace safety and coronavirus disease (COVID-19) pandemic: survey of employees. *Bull World Health Organ. E-pub*, 20.
- Yifan, Z., Li, Y., Ding, J & Liao, Y. 2021. Risk Management: Exploring Emerging Human Resource Issues during the COVID-19 Pandemic. *Journal of Risk and Financial Management* 14(228): 1-28.
- Yu, Z., Wang, G., Goldman, E., Zangerl, B., Xie, N., Cao, Y., ... Maida, M. (2021). COVID-19 vaccine: Call for employees in international transportation industries and international travellers as the first priority in global distribution. *Open Medicine*, 16(1), 134-138.

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