

Impact of Work Demand and Job Autonomy on Employee Sustainable Performance with Digital Leadership as Moderating Variable: A Proposed Framework

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Abstract

The intertwine between work demand (WD) and job autonomy (JA) as antecedent factors has long been subject to discussion with each new finding provides insights in balancing employee performance and well-being, especially in the short term. However, research on employee sustainable performance (ESuPer) with WD and JA as influencing factors has yet properly researched both quantitatively and qualitatively. Digital leadership (DL) on the other hand has becoming household jargon in the era of Industry 4.0 indicating the trend of leadership has already shifted into the facilitation of a more data-driven, flexible time, people-oriented, collaborative, and technology-savvy working environment. However, the moderation of DL within WD and JA towards ESuPer has not been addressed sufficiently. The goal of this paper is to propose theoretical foundation for the nexus of WD, JA, ESuPer, and DL, thus presenting a complete review of the references on the interdependence association of WD, JA, ESuPer, and DL. This paper provides insights for researchers as well for managers on what variables need to be considered when it comes to approximately similar interdependence.

Keywords

Work demand, job autonomy, employee sustainable performance, digital leadership

1. Introduction

Generally, the interplay of WD and JA plays a significant role in job involvement (Lambert et al., 2022). Previous finding indicates such interplay also affect employee well-being, in which JA act as a core aspect stimulates personal growth and allows employee to achieve work goals regardless of the level of WDs (Simbula et al., 2012). However, there are trivial proportion of variance of job engagement in longitudinal analysis, which at some point excessive WD will trigger stress overload and eventually decrease overall performance (Bosmans, et al., 2019). ESuPer on the other side of the equation is a relatively new area in human factor field of research, latest empirical research on ESuPer is no older than 2017 which derived from Organisational Citizenship Behaviour theory (Jiang et al., 2017). ESuPer almost always correlated with team management and traditional leadership (Cizmaş et al., 2020; Saptia et al., 2021; Ji et al., 2021; W Dey et al., 2022), but no literature has ever mentioned its correlation with the new wave of leadership trend; digital leadership (DL).

Recently, growing attention has been focused on DL as the catalyst of employee performance, moreover sustainably which is the basis of competitive and comparative advantage in digital economy (Malik and Raziq, 2022). DL receives great attention mostly in practitioner field (Buhse, 2014; Jenewein et al., 2016), there are only a handful companies reporting details about methods and strategies summarised under the hype of DL application (El Sawy, 2016). Furthermore, contrary to companies' high interest in adopting DL in practice, DL seems to be a rarely discussed phenomenon in mainstream leadership research. To add more hassle to the empirical challenge, digital leadership unlike traditional leadership are built according to environment of the organisations' are into (Morgan and Papadonikolaki, 2022), and when built appropriately, DL will facilitate innovation performance (Benitez et al., 2022), governance (Seaman, 2021), agility and transformation (Stepnov, 2021), self-organisation (Gierlich-Joas et al., 2020),

cultural intelligence (Ruth and Netzer, 2020), collaboration (Frankowska and Rzeczycki, 2020), and psychological well-being (Zeike et al., 2019).

This research is extremely important to uncover two areas that are rarely discussed and still in its infancy: (1) the interplay of WD and JA impact towards ESuPer, and (2) the moderating effect of DL in the variables' relationship. Therefore, this paper is designed to propose a conceptual model to find out the impacts of WD and JA on singular dimension of performance i.e., ESuPer, with DL as moderating variable. Researchers after reading this paper are expected to widen the theoretical field on what drives ESuPer and how/when DL come into being in typical concept. Managers and leaders also benefited with better understanding on how to balance WD and JA to acquire optimum individual performance, with DL role as catalyst.

2. Literature Review

2.1 Work Demand (WD)

Human resources are a key asset for the sustainable success of an organisation (Khurana et al., 2010). Healthy and motivated employees perform better at the workplace and thus consistently contribute towards achieving organisational goals (European Foundation for the Improvement of Living and Working Conditions, 2015). Self-directed or intrinsic motivation at work is positively associated with work performance as outcome (Kuvaas, 2009). There are several causes of employee's well-being which may be predicted by using the job demands-resources (JD-R) model (Bakker & Demerouti, 2007; Bakker et al., 2005; Bakker et al., 2003; Bakker et al., 2014; Demerouti et al., 2001). This overarching model classifies the causes of employee's well-being into two different categories (job demands and job resources).

Job demands consist of those factors (such as time pressure and workload) which reduce health and energy causing severe mental disorders over a period of time and eventually, low employee performance (Demerouti & Bakker, 2011). Employees start to invest more time to accomplish higher job demands which severely impact their work-life balance. Initially, they tend to put their maximum physical and mental efforts to effectively manage occupational stress (called "adjustive reaction") even at the cost of their health (well-being). This problem further escalates when there is a high unemployment rate in the job market forcing the employees to stay on the job (Meyer & Allen, 1991). As a result, the additional workload, time pressure and work-life imbalance create a burnout condition which could seriously threaten the employees' well-being. Job demands are positively associated with burnout. It means that employees suffer from burnout if they remain unsuccessful in effectively and efficiently managing their workload within the stipulated time. In other words, the state of burnout is generally observed due to higher job demands and insufficient job resources available to employees. As a result, the top management of the organisation would initially face low engagement and commitment from employees and later on, a high intention to leave the organisation (Hu, et al., 2011).

In contrast, job resources comprise different factors (such as management support, supervisors' feedback, skills development, and autonomy) which motivate employees and mitigate the repercussions of higher job demands (Demerouti & Bakker, 2011). The management provides appropriate financial and non-financial job resources to employees to achieve better performance. Job resources could serve as a buffer in reaching organisational goals when job demands are high.

The JD-R model was first introduced by Demerouti et al., (2001); Otu et al., (2020); Radic et al., (2020); Ndengu & Leka (2022); Cheung et al., (2011) in the context of burnout with two main composites of an occupation: job demands and resources. According to Demerouti and Bakker (2011), "Job demands refer to those physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs". Some of the examples include high work pressure, inadequate dyadic relationship with colleagues and superiors, inflexible or rigid working hours, and unfavourable working conditions. Interestingly, job demands are not necessarily negative, they are merely the requirements of one's job; they turn into job stressors when the employee needs to put more effort to meet the targets but remains unsuccessful in managing high job demands. (Meijman & Mulder, 1998).

In contrast, "Job resources refer to those physical, psychological, social, or organisational aspects of the job that are either/or: 1) functional in achieving work goals; 2) reduce job demands and the associated physiological and psychological costs; and 3) stimulate personal growth, learning, and development" (Demerouti & Bakker, 2011). Job resources are not only required to meet high job demands, they also possess their own significance. The job

a psychological state of experienced responsibility for outcomes of the work, which in turn leads to outcomes such as high work effectiveness and high internal work motivation. Job autonomy provides individuals with greater freedom, autonomy, and discretion that enables them to acquire a sense of mastery in pursuit of their career objectives (Li et al., 2020). Self-Determination Theory (SDT) suggests that satisfying a person's demand for autonomy may be positively connected with their job motivation and commitment (Debus et al., 2019; Dubbelt et al., 2019). In addition, they suggest that under these conditions, intentions to pursue and sustain a career within the firm may be enhanced. Job autonomy has been found to be favorably associated with various proactive behaviors, such as job crafting and voice (Dedahanov et al., 2019; Sekiguchi et al., 2017). Job autonomy has been the topic of numerous studies on job design, such as job demand–resource theory for many years (Deci et al. 2017). They explain that, according to the job characteristic model, job autonomy is a fundamental job characteristic that can establish a psychological state of perceived responsibility, which can lead to the appropriate work attitude and behavior.

Job Autonomy enables people to minimize conflict resulting from competing work and family life (Korunka and Kubicek 2017). Job Autonomy may become crucial for balancing family and work as working hours and two-income households expand (Wegman et al. 2018). On the basis of the logic of the job demand–resource model, it is believed that providing employees with resources such as job autonomy may increase job satisfaction by fostering work–family balance (Chen et al. 2017). Job autonomy may become a prerequisite for managing family and work as a result of the rise in working hours and number of two-income families (Wegman et al. 2018). This is also more in line with the modern era of career development, in which professions are becoming increasingly concentrated on the employee (Kost et al. 2020). According to studies, the more distinct the role distinctions between work and family, the less conflict between work and family (Padhi and Pattnaik 2017).

Debates within studies of job autonomy are mostly in the context of type employee, gender and culture. Study by Wu and Zhou (2020) establishes six causal conditions for full-time employees' high job happiness and three causal conditions for part-time employees' high job satisfaction. Their analysis reveals that full-time workers require high job autonomy, while part-time workers require minimal work–family interference. The findings provide managers with guidelines for redesigning occupations in the era of the gig economy. This also suggests that when employees have greater control over their work, they are better able to manage workplace stress (Schif and Leip 2019). What gender, culture and job demand has to do to job autonomy? Halliday et.al. (2017) find that perceived job autonomy relates indirectly through stress stronger for women in lower gender egalitarianism cultures, compared with women in higher cultures and are not significant for men. This lead to the conclusion that job autonomy has nothing to do with engaging and retaining female talent in lower gender egalitarianism cultures, where they will show less stress, compared with male in lower contexts, and male and female in higher contexts.

There is a constant and favorable relationship between job autonomy and performance, according to research by Gellatly and Irving (2001). The study indicated that perceived autonomy positively impacts contextual performance. The performance of managers who report greater autonomy in their work is superior than that of managers who report less autonomy. Zhao, Lie, and Shield (2020) offer a moderated mediation model to explain the effect of job autonomy on the job and job satisfaction of knowledge workers via crafting activities. They demonstrate that leisure crafts influences the relationship between job autonomy and job happiness, and by extension, job performance. In addition, they demonstrate the moderating impacts of person–organization value congruence on the relationship between job autonomy and job and leisure crafts, as well as the indirect effect of job autonomy on the satisfaction and performance of knowledge workers. These findings suggest that organizations with a high concentration of knowledge should implement efforts to foster an environment favourable to leisure creating.

The findings also underlined the impotencies of fostering a culture of crafting to facilitate person-organization value congruence and strengthen the positive relations between job autonomy and crafting activities. Self-influence process also found motivate individuals to complete work (Stewart, et.al., 2018). This explain the self-leadership to psychological theory and research.

How leadership effects job autonomy? Autonomy supportive leadership focus on leading employees by promoting their autonomous motivation (Slemp et al., 2018). According to Haerens et al. (2018), leaders who want to encourage autonomous motivation should be interested in their employees' viewpoints and give them with opportunities for initiative and relevant justifications for completing their tasks. Based on SDT and job characteristics theory, Gao and Jiang (2019) developed a theoretical hypothesis model to investigate the mediating and moderating mechanisms of empowering leadership on employee innovative behavior, by introducing meaningful work as the mediating variable

and job complexity as the moderating variable. Not only did job complexity modify the relationship between empowering leadership and innovativeness, but it also moderated the relationship between meaningful work and innovation. This study presents explanations for the relationship between empowered leadership and employee innovative behaviour. Supervisor's support to practice autonomy provides employees with continuous learning, development and preferences (Maymon & Reizer, 2017).

The moderating effect of supervisor support on the relationship between job autonomy and career self-management is stronger when calling is low. Stiglbauer and Kovacs (2018) study that supervisor support moderates the relationship between job autonomy and career self-management because it helps fulfil subordinates need satisfaction. As been discussed before, job autonomy helps satisfy employees' need for autonomy and then enhances their self-determined motivation to engage in career. Supervisor support, which express concern and care for subordinates, may serve as protective resource that inspires employees to bravely explore things in the state of high autonomy. SDT has significant ramifications and means that leader autonomy support is essential for effective service delivery (Shih et.al., 2019). The autonomy support of a leader is an effective means of fostering the psychological contract fulfilment of employees, so increasing their engagement at work and service performance. Scopus database analysis as depicted in Figure 2 shows job autonomy research closely related to job satisfaction, when autonomy is given to a certain level to the employee it will affect their relationship with the workplace, peers, and leaders, and eventually affecting their stress level, performance, turnover intention, and work engagement.

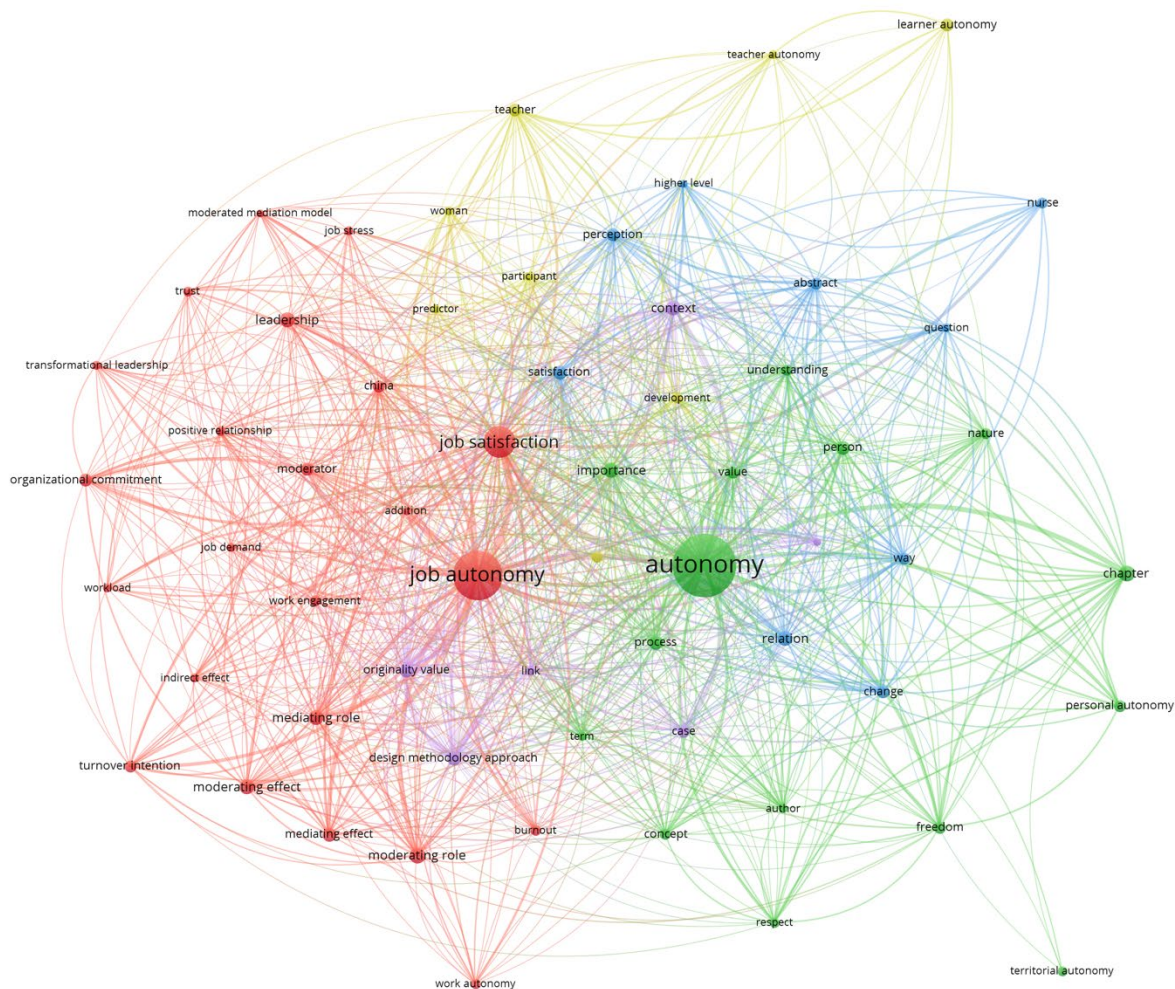


Figure 2. Job autonomy research interconnection

2.3 Employee Sustainable Performance (ESuPer)

A tremendous rise in the significance of sustainable organizations has been studied over the past few decades. The term "ecology," which refers to an organization's or procedure's capacity to develop, raise, care for, and preserve life,

Figure 3. ESuPer research interconnection

2.1 Digital Leadership (DL)

Digital Leadership (DL) term resulted from the intersection between the discipline of Information Technology and Human Resources, due to the fact both technical factors and human factors are two of the most influencing factors in the field of corporate digital transformation. Such intersection between these two disciplines brings a wave of interest among practitioners and scholars on how leadership and digital transformation influencing each other, hence brought about DL concept which facilitates socio-technical aspect of the organization (Gierlich-Joas et al., 2020).

The concept of leadership has a extensive history and is deeply rooted in the field of management. Some focused on leadership as a process in which a manager intentionally influences other person (Yukl, 2013). Others describe specific leadership functions, such as the inter-relational, the information processing, and the decision-making role (Mintzberg, 2007). Having reviewed multiple definitions, it can be tentatively concluded leadership as the management of employee relations and the exercise of authority to coordinate tasks within an organization to fulfil operative and strategic goals (Beare et al., 1997). This definition has been regularly employed in recent research (Korica et al., 2015), and from such perspective, it combines the inter-relational, decision-making and information processing roles of leaders well. In addition to research on the dimensions and definitions of leadership, an extensive literature exists on leadership theories and leadership concepts. Leadership theories offer explanations for leadership decisions or forecast future developments, and in turn, leadership concepts draw on these abstract theories to tackle the implementation of concrete guidelines in practice (Lang and Rybnikova, 2014). Leadership theories and concepts have transformed significantly throughout the ages. In the 1920s, leadership theories stressed the role of leaders and their personalities, but in following years shifted to focus on the contextual factors and the personality of the follower. More recently, concepts of leadership have taken external factors, such as the availability of technology into account (Dinh et al., 2014).

Due of the interdisciplinary nature of the subject; business, management, accounting, psychology, and social science have addressed the relationship of digitalization and leadership, taking either a macro or a micro outlook on the subject (Cortellazzo et al., 2019). On the macro outlook, digital leaders and new organizational forms (Henttonen et al., 2012), tools that facilitate leadership and how to apply them (Cortellazzo et al., 2019) and ethical challenges for leaders have been examined. The need to balance privacy protection and controlling mechanisms in times of nearly unrestricted availability of data has also received consideration (Hofmann, 2007).

On the micro outlook, researchers have focused on the development of C-suite roles, leaders' skills in the digital era and virtual teams (Cortellazzo et al., 2019). The combination of people-orientated and technical skills is considered a key factor for digital leaders (Diamante and London, 2002), and leaders are compulsory to develop intercultural competencies as they interact with many cultures (Schwarzmueller et al., 2018). Finally, virtual teams are of great scientific curiosity. Because of the availability of collaboration tools, individuals in different time zones and spaces and within various organizational boundaries can work together in a decentralized team (Hambley et al., 2007). Generally, the different disciplines offer heterogeneous perspectives on leadership, ranging from technology-related approaches to ethical questions and individual requirements for leaders. Nevertheless, the influence of digitalization on leadership remains understudied.

Digital leadership unlike traditional leadership are built according to environment of the organisations' in (Morgan and Papadonikolaki, 2022), and when built appropriately, DL will facilitate innovation performance (Benitez et al., 2022), governance (Seaman, 2021), agility and transformation (Stepnov, 2021), self-organisation (Gierlich-Joas, Hess, and Neuburger, 2020), cultural intelligence (Ruth and Netzer, 2020), collaboration (Frankowska and Rzczycki, 2020), and psychological well-being (Zeike et al., 2019). Based on Scopus, CrossRef, and Google Scholar database analysis in Figure 4, it is shown that the term 'digital leadership closely related to transformation, digital era, company digital leaders, role, customer, digital skill, industry, and employee. There are a number of keyword associated with digital leadership such as relationship, virtual team, globalisation, learning, servant leadership, and organisational performance.

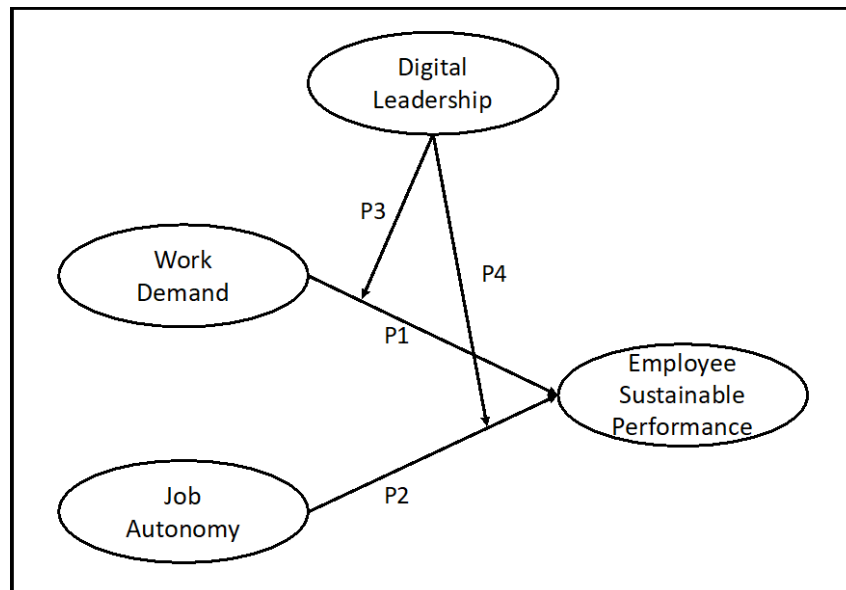


Figure 5. Proposed Framework

4. Implications

This study contributes to theoretical and practical implications. From the theoretical perspective, this research contributes to the literature of WD, JA, ESuPer, and DL, and providing a strategic conceptual model which elucidates the established synergistic nexus between these variables. Consequently, this research fills the gap in the literature which calls for more studies on the links between WD, JA, ESuPer, and DL. Ultimately, by applying the conceptual model of this research, researchers can develop empirical studies that illustrate the scheme's relationships in an effective way.

From a practical perspective, the conceptual model assists decision-makers and managers in improving performance as a synergistic influence. Also, the existing study can help managers better understand the influence of the adoption of WD, JA, ESuPer, and DL theories in organisational context (i.e., managerial and leadership role). Consequently, managers and leaders must be concerned about balancing the independent variables to meet optimum level of interplay that leads to desired individual performance. Additionally, this study assists managers with in-depth knowledge of a concept of each variable's capabilities and components, and how to utilise these capabilities to improve the organisation's overall performance and create the organisation's competitive and comparative advantage.

5. Conclusion and Recommendations

The latest research has given much attention to WD and JA concepts in recent years but there is a significant cavity regarding their effects on ESuPer (Ji et al., 2021) as well as the moderating role of DL (Avidov-Ungar et al., 2022). Numerous similarities and variances between WD and JA areas and the understanding of their importance can contribute to future research on human resources management. To understand this subject, the study must present results of research projects that have been managed to analyse the integration of independent variables and its impact on an organisation's performance through ESuPer. In the organisational context, both areas are equally important in management studies which cover a wide range of scope and applications. This research contributes to the management literature by expanding the examination of HRM practices. Several studies suggested that there is a need to fill this gap, therefore this study recommended a conceptual model.

The main limitation of this work is the absence of empirical research. The validity and the theoretical soundness of the conceptual framework of ESuPer can only be tested by collecting empirical data from real-life cases and testing the propositions of the framework subsequently. This will be taken up as the future scope of the present work. Moreover, the conceptual framework proposed in this research will be statistically validated, using the structural equation model technique and/or partial least square approach, based on a survey that is being performed on an global

basis. Future research can validate the current conceptual framework through focus group and qualitative analysis, which potentially deepen the current study. A complete verification process of the framework is needed to further understand the subject. Additionally, it also makes us understand how organisations impose and combine those variables and how this combination influences organisation's performance. For that reason, it is essential to apply distinct evaluating techniques in various situations. The questionnaire for this study has been developed and the survey will be performed on a large scale. Correspondingly, the framework of this paper can validate the nexus among WD, JA, ESuPer, and DL.

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