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Job Design and Sustainability: Exploring Uncharted Link through Literature

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ABSTRACT

The International Labor Organization's (ILO) decent work agenda reflects the sustainable approach for dynamic change in the design of jobs. The purpose of this literature survey is to examine the job design literature through the lens of sustainability for its evolution as decent work or sustainable job with human, ecological and societal compatibility for its pertinent effects benefitting all stakeholders involved in the business. This paper presents the synthesis of literature by reviewing theoretical development in job design, through the research articles published between the years 2000 till 2021, and explicate the argument of integrating sustainability as a foundation for contemporary job design approach. The literature review highlights gaps in literature for theoretical integration of sustainability into contemporary job design models and offers guidelines for ideological transformation through policy interventions at organizational and national levels.

1. INTRODUCTION

Sustainability heralds the paradigm shift for the 21st century global business leaders, disrupting traditional management approaches to sustainable development (Guerci & Carollo, 2016; Järlström et al., 2018). Since the United Nations' (UN) Sustainable Development Goals (SDGs) emerged (Littig, 2018; United Nations, 2015), the HRM practices are required to innovatively align with the discourse of sustainability (Aust et al., 2020; Järlström et al., 2018), regenerating a contemporary approach addressing to the social, economic and ecological needs of all the stakeholders in businesses (Cheema & Javed, 2017; Guerci et al., 2015). As a result, *Sustainable* or *Green Human Resource Management* (GHRM) has emerged as a broader framework encompassing the debate of ethics, corporate social responsibility (CSR), environmental regulation, economy and productivity into the HRM activities for a responsible people management approach with a nuanced focus to reduce organizational carbon footprint (Aust et al., 2020; Ehnert et al., 2016; Ehnert & Harry, 2012; Jackson & Seo, 2010; Järlström et al., 2018; Kramar, 2014; Renwick et al., 2016; Uddin & Islam, 2015).

While reconciling the eighth SDG of decent work and economic growth (Littig, 2018; Popaitoon, 2019; United Nations, 2015), compatible to the International Labor Organization's (ILO) agenda of decent work, a paradigm shift has been noticed in the design and structure of jobs. Thus, the contemporary jobs are required to be designed in compatibility to the phenomenon of decent work yielding sustainable employee outcomes in terms of health, well-being, employee development and performance (Clegg & Spencer, 2007; Ehnert et al., 2016; Jabbour & Santos, 2008; Stankevičiūtė & Savanevičienė, 2019). Job design refers to the structural layout of the work employees perform (Oldham & Fried, 2016). It is the foundation activity of HRM as it shapes the basic structure of tasks and duties to be performed by the employees in relation to the organizational activities carried out in the respective technological and procedural work setting (Foss et al., 2009). The term "decent work" is a value laden and expansive concept that embodies dignity at work (Winchenbach et al., 2019) and sums up aspirations for people in their working lives (Bletsas & Charlesworth, 2013; ILO, 2012). It is a broad phenomenon that involves creating equal opportunities for fair and productive employment, safer workplaces, ensuring social security of families, respectful environment at work and improved health and well-being of employees (Bletsas & Charlesworth, 2013; Cooke et al., 2019; ILO, 2012). However, the extant literature has a gap in explaining what constitutes or defines a "*decent work*" (Järlström et al., 2018; Littig, 2018). On the other hand, the need to create and define decent work has been influenced by the industrialization which has transformed societies into high-tech and work centric with enhanced production and consumption patterns ultimately impacting the ecological environment (Hoffmann & Paulsen, 2020). Hence, the "*work-environment dilemma*" calls for attention of job design scholars, environmentalists and industry practitioners (Hoffmann & Paulsen, 2020) towards the design of jobs with human, ecological and social compatibility yielding sustainable results benefitting employees, organizations and societies (Vanroelen, 2017). While there has been an increasing demand for employee well-being (Daniels et al., 2017), social equality (Docherty et al., 2015), environmental performance (Vanroelen, 2017) and the use of big data and analytics (Hecklau et al., 2016), it is also needed to shift the focus of job design literature from micro level individual outcomes to the macro level organizational and societal outcomes (Aust et al., 2020; Becker & Huselid, 2010). Hence, it is deemed essential to examine the job or work design literature from the sustainability perspective, highlighting the embedded approaches as well as emerging themes for future research development. The current research, thus, answers the following research questions:

RQ1: How has the evolution in job design literature incorporated the discourse of sustainability while defining decent work?

RQ2: What are the emerging themes for research in job design with respect to sustainability?

2. REVIEW METHOD

This research examines the secondary database for qualitatively assessing the literature on the topic of job design with an emphasis on sustainability. It presents the synthesis of literature by focusing on sustainable antecedents as well as outcomes of job design along with theoretical development in job design with respect to sustainability. The goal of this literature survey is to generalize major findings and identification of potential gaps for future investigation. In this regard, this paper analyses the development of job design theories and explicate the argument of integrating sustainability as a foundation for contemporary job design approach. Hence, a purposive sampling of articles has been carried out with the inclusion criteria of a) research papers belonging to the databases of JSTOR, Emerald, Springer, Elsevier, Taylor and Francis and Science Direct, b) researches published on the subject of job design using the keywords *"sustainable jobs", "sustainability in job design", "job design models", "sustainable design of jobs", "decent work", "ILO decent work agenda"* c) the research articles published between the years 2000 till 2021, d) with the pivotal focus on sustainability,

either as an antecedent or as an outcome of job design, have been critically reviewed. This literature survey uniquely contributes to the body of literature by offering a novel perspective of sustainability as a central focus of job design which opens up significant avenues of research for job design scholars and insightful perspectives for policy makers.

3. REVIEW AND SYNTHESIS OF JOB DESIGN LITERATURE

Evolution of Job Design: From Efficiency to Work Characteristics

Though the job literature uses the term of *work* and *job* interchangeably (Torraco, 2005), there still remains a technical difference. Work is a general representation of what an individual performs whereas job is specifically associated with the work for which an employee is paid and requires to exhibit certain behaviors while performing associated duties (Coyle-Shapiro et al., 2004). However, job design refers to the structure of a job detailing nature of tasks, duties, competencies, functions that an employee has to perform for organization on a daily basis (Oldham & Fried, 2016). The earliest approach on job design was job simplification and specialization for improved employee skills and efficiency at work (Babbage, 1835; Smith, 1850). It was further extended by the scientific approach to management stressing upon job simplification and standardization, reflecting classical industrial engineering (Campion & Thayer, 1987; Taylor, 1911). This approach is still in use through the practice of job engineering, a computer assisted human-machine interface of today's advanced work system (Garg & Rastogi, 2006). However, the scientific principle in job design was criticized for its mechanistic nature (Campion & Thayer, 1987) with a top-down approach (Oldham & Fried, 2016), despite of higher productivity, for its lack of human involvement, thus, leaving behind less motivated and less satisfied employees (Campion & Thayer, 1987).

Herzberg's dual factor theory defined two distinct attitudes of employees at work, referring to as dissatisfaction and satisfaction caused through hygiene and motivating factors respectively (Alshmemri et al., 2017; Strachan, 1975). This theory has been further applied to the job redesign approaches of job enrichment, job enlargement and job rotation (Garg & Rastogi, 2006) with proven results for employee satisfaction and better work environments, still in use today (Oldham & Fried, 2016). However, Herzberg's theory failed to guide with job properties that could be effective in job enrichment (Oldham & Fried, 2016), paving way for Requisite Task Attributes (RTA) that credited six job characteristics i.e. variety, autonomy, required interaction, optional interaction, knowledge and skill required and responsibility to be positively associated with job satisfaction (Blau & Katerberg, 1982; Turner & Lawrence, 1965). Later, it was extended with a focus on four job characteristics namely autonomy, variety, task identity and feedback, highlighting employees' internal work motivation (Hackman & Lawler, 1971).

The Hackman & Lawler's (1971) approach and the expectancy theory of motivation (Porter & Lawler, 1968; Vroom, 1964) turned out to be the foundation for the famous Job Characteristics Theory (JCT) (Hackman & Oldham, 1976), theoretically framed as Job Characteristics Model (JCM). The attributes of skill variety, task identity, task significance, autonomy and feedback, according to JCT, cause internal motivation to work mediated by psychological states of meaningfulness, responsibility and knowledge of results among employees (Campion & Thayer, 1987; Garg & Rastogi, 2006; Hackman & Oldham, 1976; Kiggundu, 1981). The effectiveness of JCM spawned a great deal of researches with varying correlation among job characteristics and employee outcomes (Acquah, 2017; Champoux, 1991; O'Brien, 1983; Simonet & Castille, 2020). In contrast to the JCM, a noteworthy development in the job design literature was made with the Social Information Processing Approach (SIPA), attributing the individual attitude and behavior to the social context as important antecedents in the design of work (Blau & Katerberg, 1982; Salancik & Pfeffer, 1978). According to SIPA, the employees' perception of job characteristics are not fixed, rather they are shaped by the social

environment or the networks of the social relationships (Blau & Katerberg, 1982; Pollock et al., 2000). This approach, along with the JCM, also got recognized and tested in various research settings, but the lack of explanation for the causal mechanisms through SIPA delivered inconsistent results for the effects of contextual factors on employees' job satisfaction (Pollock et al., 2000).

Socio-Technical Systems (STS) theory integrates complex interaction between humans, technology and environmental factors synergized into the work system (Emery & Trist, 1969; Sony & Naik, 2020; Thorsrud, 1968; Trist, 1981). STS is akin to the philosophy of systems engineering that is reflected in today's complex systems design (Baxter & Sommerville, 2011; Sony & Naik, 2020). The subsequent applications of STS gave birth to the idea of self-managed teams, redesigning work systems for productivity improvement and even applied for environmental issues confronted by the 21st century organizations (Baxter & Sommerville, 2011; Sony & Naik, 2020; Torraco, 2005).

JCM and STS, therefore, are marked as major developments in the job design literature bringing various mediating and moderating variables in the forefront (Parker, 2014). However, both theoretical models present limitations with respect to describing causal relationships and effects of various individual and contextual factors in the job design (Parker et al., 2001). It is important to note that the design of job addresses the larger context of work, the one which encompasses not only the job itself but also the contextual factors that impact the incumbents (Johns, 2010). This understanding demands to delve deeper into the job design features shaping the environment of jobs (Clegg & Spencer, 2007; Johns, 2010). Here, the environment refers to the job conditions comprising of the demands and the resources that synergistically create a job (Johns, 2010) and influence the job holder's psychological and physical health and well-being.

Karasek's Job Demands-Control-Support (JDC/JDCS) model has been widely researched model for the relationship between job environment characteristics and employee well-being (Asif et al., 2018; Karasek & Theorell, 1990). This model have been used to study the impact of work characteristics on employees from either a stress perspective or a positive feeling perspective (Asif et al., 2018; Johnson & Hall, 1988; Karasek & Theorell, 1990; Warr, 1999). The model's strain hypothesis explains that high job demands and low job control will lead towards higher stress, thus detrimental for employee well-being (Asif et al., 2018; Karasek, 1979; Oldham & Fried, 2016). On the other hand, it also describes the buffer effect through the resources of job control and social support which reduce the damaging effects of job demands (Häusser et al., 2010). The JDC model has been further extended through the Job Demands-Resources (JDR) model by (Demerouti et al., 2001). Classifying the occupational characteristics into job demands and job resources, the JDR model corroborates job demands as the factors that require efforts from employees resulting into stress, and job resources as the factors that buffer the consequences of job demands by reducing them (Bakker et al., 2004; Demerouti et al., 2001).

In general, the weak results obtained through the use of JCM paved the way for testing the JDC/JDCS and JDR models (Oldham & Fried, 2016). These models greatly emphasized on exploring and testing various moderating and mediating variables emerging from the work environment that considerably define the effects of these factors on various employee outcomes with a nuanced focus on employee health and well-being (Bakker & Demerouti, 2007, 2014; Orgambídez-ramos & Almeida, 2017; Sutton, 2020), thus leading the job design to vigorously shift its focus towards a newer approach that is sustainable in nature itself, with an emphasis on exploring sustainable antecedents and outcomes. Table 1 summarizes the comparative analysis of job design approaches as discussed.

Table 1. Comparative Analysis of Job Design Approaches.

Job Design Theory	Author & Year	Focus	Finding	Theoretical Gaps
Scientific Management	(Taylor, 1911)	Efficiency	Job specialization	Lack of human element
Hygiene-Motivation Theory	Herzberg, (1966)	Efficiency Motivation	Job enrichment	No discussion of job traits causing enrichment
RTA theory	Turner & Lawrence (1965)	Efficiency Motivation	6 job traits cause internal motivation	Lack of empirical evidences
Hackman & Lawler's Theory	(Hackman & Lawler, 1971)	Efficiency Motivation	4 job traits cause internal motivation, depending on their growth needs	Lack of empirical evidences
Socio-Technical Theory	(Fick, 2017)	Efficiency	Joint optimization of people, technology and system	Lack of support for design of job at individual level
Job Characteristics Model (JCM)	(Hackman & Oldham, 1976)	Efficiency Motivation Job Satisfaction	5 job characteristics cause motivation	Lack of contextual and moderating variables
Balance Theory	(Smith & Sainfort, 1989)	Stress	Working conditions, both psychological and social, cause stress among employees	Limited evidences for stressful factors
Job Demands Control Model (JDC)	Karasek (1979)	Burnout	Job Demands and Job Control impact the level of burnout among employees	Weak support for buffer effect
Job Demands-Resources Model	(Demerouti et al., 2001)	Employee Well-being	JD and JR have significant impact on health and well-being of employees	Scope for exploring more variables from work environment for EWB

Stepping into Sustainability: The Emergence of United Nation's Decent Work Agenda

The eighth goal of the UN sustainability agenda for decent work and economic growth battles with the global challenge of declining poverty and improving economic development through productivity and technological innovation (United Nations, 2015). Job creation and entrepreneurship being the key drivers for this goal, designing jobs to combat unemployment, social inequality, human trafficking, forced labor and climate change (Littig, 2018; Rayan et al., 2020; United Nations, 2015) opens up the debate for defining decent work in order to design a similar environment that is supportive to attain the goal. The concept of decent work was first launched in 1990 by the International Labor Organization (ILO) in order to promote coherence between social and climate policies (Sanchez & Poschen, 2010) which gained popularity after its inclusion into the UN's 2030 Agenda for SDGs. Decent work refers to the job that fairly offers human dignity, freedom and respect (Cooke et al., 2019; Winchenbach et al., 2019), redefining the quality of employment with respect to country differences (Cooke et al., 2019; Gibb et al., 2020). Reflecting heterogeneity of the concept, each author defines it in a different way, however, self-respect, dignity, safety and meaningful work remain the most common features to describe decent work (Cooke et al., 2019; Winchenbach et al., 2019). The most commonly discussed definition of decent work given by ILO, describes it as:

"Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men."

Based on ILO's definition, another comprehensive concept of decent work comes in the following way:

"Decent work helps all workers attain a sense of self-respect and dignity, experience freedom and security in the workplace, and (as far as possible) is afforded the opportunity to choose and execute productive, meaningful and fulfilling work that will enable them to construct themselves adequately and without restrictions and make social contributions." (Di Fabio & Maree, 2016)

The underlying philosophy of respect, safety and human development is explained recently by Seubert et al (2021) in the following manner:

"Work that offers a living wage, job and planning security (reproductive–material dimension), integration in social networks, communication and cooperation opportunities (social–communicative dimension), protection by labour and social legislation, rights and opportunities to participate at work (legal–institutional [participation] dimension), recognition, appreciation and social status (status and recognition dimension), as well as identification with and meaning in work (meaningful–subject-related dimension)." (Seubert et al., 2021)

The ILO's decent work agenda is based on four strategic objectives; i) employment creation; ii) guaranteeing labor rights at work; iii) extending social protection and d) promoting social dialogue with gender equality at its heart (Bletsas & Charlesworth, 2013; Cooke et al., 2019; ILO, 2012; Winchenbach et al., 2019). This agenda promotes work sustainability that aligns employees' health, capabilities, competencies, values, motivation and job characteristics to yield a *sustainable job*, a term operationalized and used conjointly for decent work (Gibb et al., 2020; Hoffmann & Paulsen, 2020; Vanroelen, 2017). Therefore, the contemporary approach to job design demands for designing sustainable jobs which are compatible to the functional properties of humans, develop efficient work strategies as well as are self-fulfilling in nature (Vanroelen, 2017). Based on this criteria, sustainable jobs refer to the meaningful jobs with better working conditions (Vanroelen, 2017), fair wages (Gibb et al., 2020) and promote employee well-being (Cooke et al., 2019; Redekopp & Huston, 2019). With the challenges of modern society in terms of rapid urbanization, environmental degradation and dwindling

quality of life (Rayan et al., 2020), the decent work also inculcates environmental sustainability in itself, thus giving birth to the concept of *green jobs.* The creation of green jobs, according to ILO (2012), is indeed a strategic response to the issues of climate degradation as well as socially responsible development through decent work, generating a novel approach of *GHRM*. Green jobs are decent jobs that encompass humanitarian factor and include fair remuneration for work with equal opportunities for career growth (Mansour et al., 2017). According to the World Bank (2012), green jobs are a product of either employment in green industries or a consequence of green policies. Sulich & Zema (2018), however, contends that green jobs are associated with preserving environment in traditional sectors of manufacturing, construction or renewable energy, with a great deal of opportunity for entrepreneurship. However, there seems to be a great deal of variation in understanding of decent or sustainable and/ or green jobs based on the cultural and societal context (Cooke et al., 2019; Sulich & Zema, 2018; VanWynsberghe, 2015). Focused on the human action, green jobs are also considered to be the jobs in businesses that produce services or goods that conserve nature (Popławski et al., 2017). Hence, the literature reflects different perspectives to define a green job but lacks a nomenclature to reflect uniformity of the concept. In a nutshell, the notion of decent work is a broader phenomenon, generating *sustainable jobs* and *green jobs* as its by-products.

The 21st century workforce comprises mainly of millennial and post millennial generational groups with greater emphasis for meaningful work, collaborative work environment and better relationships with peers and managers (Yi, 2013). Hence, the relational job design theory is important (Grant, 2007) that emphasizes a job to contain social traits of job contact and job impact yielding prosocial motivation among employees, providing them with more opportunities to do good and create better impact on people and society (Shin & Hur, 2021; Steijn & van der Voet, 2017). This notion is parallel to the JDR perspective where prosocial motivation attenuates the damaging effects of demanding jobs whereas accentuates the buffer effect of job resources (Shin & Hur, 2021). Matching with the agenda of decent work, prosocial motivation may also prove to be effective in promoting diversity and inclusion (Nelissen et al., 2017), improving employee well-being (Kibler et al., 2019; Shin & Hur, 2020) and inculcating environmentally responsible behavior among employees which may lead towards the creation of green jobs (Bendell, 2017).

The increasing demands for work discretion, flexibility and meaningfulness from the modern day workforce (Han et al., 2021; Rofcanin et al., 2019) has led the researchers towards enriched job design through relational job crafting (Rofcanin et al., 2019; Wood et al., 2012) with positive effects on employee well-being and work engagement. Jabbour (2011) introduced a dialogue relating HRM and ergonomics for employee health and well-being. He extended the focus of job design and its effects on employee health towards a linkage between ergonomics, the design and engineering aspects of workplace, and work psychodynamics, a psychological load created on employees due to the jobs and the design of workplace (Jabbour, 2011). Jabbour (2011) concluded his proposed model linking HRM, ergonomics and work psychodynamics as a naïve perspective where ergonomics and the psychodynamic aspects of jobs must be empirically tested for building sustainable organizations. With the focus on employee well-being, an important consideration is the constant application of JCM and JDR models for the effects of job characteristics on employee performance and health outcomes (Cullinane et al., 2014; Daniels et al., 2017; Daniels & de Jonge, 2010; de Jonge et al., 2012; Han et al., 2021; Simonet & Castille, 2020; Wood et al., 2012), proving the relevance of theoretical base with the changing paradigm. Hence, the contemporary literature of job design seems compatible with the sustainability agenda of promoting decent work.

Job Design and Sustainability: Underpinning Theoretical Perspectives

Building the foundation of sustainable HRM, stakeholder salience approach addresses the responsibility of HRM towards a wide range of stakeholders (Järlström et al., 2018) identified on the basis of their legitimacy,

power and urgency (Mitchell et al., 2011; Mitchelle, 2018). Though the salience approach to stakeholders seems to be absent from the sustainable HRM literature, particularly for its role in the design of job (Guerci et al., 2015), it still serves as the foundation for embedding sustainability into the core of HRM functions and alignment with the decent work agenda. An extension of Resource-Based-View (RBV) provides theoretical ground to the sustainable HRM through Natural-Resource-Based-View (NRBV) which explains strategic linkage between the natural environment and the organization (Cabral & Lochan, 2019). NRBV theory is built on three pillars: pollution prevention, product stewardship and sustainable development, hence, guides organizations on building sustainable competitive advantage by developing green competencies among employees (Cabral & Lochan, 2019).

The GHRM literature adopts the behavioral perspective through an array of behavioral theories (Ren et al., 2018). Therefore, there has been a growing interest of researchers towards the green or pro-environmental behavior for sustainable employee and business outcomes (Ehnert et al., 2016; Norton et al., 2015; Rayner & Morgan, 2017). Geiger et al (2019) asserts the need to focus on the behavioral aspect through the phenomenon of behavioral diffusion, where socialization processes enable diffusion of such behaviors from one person to another, creating conformity pressure on people to affiliate and develop group identities through replication of similar behavior. With the shift towards creation of sustainable or green jobs, it is expected from employees to exhibit behaviors, voluntarily or non-voluntarily, that enhance business environmental performance (Wiernik et al., 2016). A myriad of researchers have discussed pro-environmental behaviors in terms of eco-initiatives, energy conserving attitudes, sustainable behavior, avoiding harm to planet as well as influencing people (Chaudhary, 2019; Norton et al., 2015; Robertson & Barling, 2012; Zibarras & Coan, 2015).

The foundation of behavioral significance is grounded on the Ability-Motivation-Opportunity (AMO) theory (Guerci & Carollo, 2016). It speculates that employees' performance is an outcome of the required knowledge and skills, their motivation for work and the opportunities to perform emerging from the environment or organization (Rayner & Morgan, 2017). A systematic review on GHRM by Renwick et al (2012) has employed the AMO theory to identify the key HRM functions for employee involvement and environmental management outcomes. While identifying environmental knowledge, green leadership and rewards for environmental performance as important findings from literature, Renwick et al (2012) discussed that in order to drive employees' performance towards environmental objectives, it is essential to incorporate environmental knowledge and attitudes in their jobs. Similarly, Guerci and Carollo (2016), using the AMO theory, have asserted that the opportunities for employees to perform come from the design of job that allows employees to exhibit environmentally responsible and sustainable behavior. Another review of literature by Cooke et al (2019) examined the decent work and the ILO framework from the institutional, ideological and cultural distance perspective in the special context of China. While the review highlighted the need for ideological transition of Chinese work ethics as well as cultural transition from collectivism to individualism focusing individual employee rights, it also endorsed the significance of decent work environment with employee well-being focused HR orientation. Such an approach offers better employment conditions and employee development opportunities, enhancing social and economic well-being, leading to more employee involvement. This notion of decent work, highlighted by Cooke et al (2019), is found aligned with the underlying belief of AMO theory. In addition to the AMO, Norton et al (2015) proposed a conceptual model based on person-environment fit and job performance for Employee Green Behavior (EGB) highlighting the attitudinal Theory of Planned Behavior (TPB). According to Norton et al (2015), TPB is the most prominent framework for explaining environmental behavior at work and also in general. Another important theoretical justification for employee sustainable behavior is derived from the self-determination theory (Norton et al., 2015) which attributes personal satisfaction derived from doing good to be the primary reason for EGB. In congruence to this justification, relational job design theory is effective in corroborating the motivation of

employees to perform meaningful jobs (Grant, 2007). Additionally, competencies also hold great value while delineating required behavior at work. Therefore, the NRBV theory is important that guides on building green competencies among employees (Cabral & Lochan, 2019). Also, Robert's framework of green competency is worth mentioning here since it categorizes competencies into natural, acquired, adapted and performing competencies (Subramanian et al., 2016).

The sustainable approach in job design is also reflected through the role theory which posits that individuals in organizations are engaged in roles, defined by the expectations of behavior within organizations, guided by individual values, knowledge and perceptions (Bush, 2018). These roles are a reflection of norms which may differ across individuals, groups and organizations, resulting into the role conflict, an incompatibility either to the employees' internal standards and organizational expectations or due to the lack of time or resources needed to execute the role, and also into role ambiguity, which indicates lack of clarity in a role (Bush, 2018). Kahn et al (1964) explained that ambiguity in a role may result due to changes in work environment which are not clearly articulated in the design of work. Hence, expecting employees to engage in pro-environmental role requires clearly designed jobs (Bush, 2018).

A systematic review of intervention studies by Daniels et al (2017) discusses the employment practices of job redesign that augment employee well-being. Since work environment has a significant effect on employee health and well-being, job stress theories may shape conceptualization of sustainable job design in alignment with the decent work agenda given by ILO. In this regard, the reciprocal models of JDCS and JDR explain work features that are detrimental to the well-being of employees, reciprocated through the buffer effects of certain work features (Bakker et al., 2010; Bakker & Demerouti, 2014). A meta-analytic review by Lesener et al (2019) claims the JDR model to be best suited to explain employee well-being, while suggesting further developments in terms of reciprocal relationships between job characteristics and well-being for future research. In a recent study, the JDR model has been employed to test the relationship between office space and employee well-being (Colenberg et al., 2020). This study directs the employers' attention towards designing healthy office space since it influences employee physical health. However, Colenberg et al (2020) also stressed upon the need to explore more mediating and moderating variables for explaining the relationship between environmental features and well-being through multi-level analysis.

Emerging Themes of Research for Sustainability in Job Design

Conceptualization of Decent Work from Cultural Perspective

The notion of decent work discussed in this paper reflects a pluralistic approach that has been employed in literature to define the concept. Decent work is not just a goal in itself, rather a driver of sustainable development (ILO, 2012). While attempting to explain decent work, authors have adopted economic, social and environmental sustainability perspectives, leading to generate the idea of *sustainable work*. Being heterogeneous in nature, the concept of decent work is far beyond good wages, thus expands the traditional concept of work while embedding the discourse of sustainability as a transformational link. However, there is a void in defining as well as practicing decent work in general (Cooke et al., 2019; Winchenbach et al., 2019). The global efforts to attain the agenda of decent work has guided the national leaders, business practitioners and researchers to focus towards evaluating the national labor policies for quality of work (Cooke et al., 2019; Gibb et al., 2020). Since the labor policies differ at national level, it is thereby important for researchers to corroborate the concept as well as evaluate its application using the decent work dimensions of rights at work, employment generation, social protection and social dialogue (ILO, 2012). Cooke et al (2019) proposed an ideological paradigm shift for practicing decent work in China by eliminating institutional discrimination towards group of workers as well as building up institutional capacity for promoting social dialogue. Similarly, living wages have been used by Seubert et al (2021) while proposing a framework for practicing decent work

and testing effects of moderating contextual factors on decent work at individual, organizational and national levels (Seubert et al., 2021). It is hereby important to note that the economic development may or may not be compatible with the working conditions in any country, therefore, implementation of green economy in different national context is an emerging discourse as an outcome of decent work (Gibb et al., 2020). Moreover, the plurality of the concept of decent work demand conceptualization to be further developed at individual, organizational and country levels, particularly in the countries grappling with the environmental and human rights issues (Järlström et al., 2018; Ren et al., 2018).

Exploring Determinants of Job Quality

The debate for good vs bad job has been strengthened after the emergence of decent work, directing the researchers and think tanks towards the quality of job, an important dimension of employment creation (Myhill et al., 2021; Wilson et al., 2008). Job quality is a multifaceted phenomenon, commonly measured through pay, progression opportunities, benefits and job satisfaction (Bae & Mowbray, 2019; Knox et al., 2014), having diverse outcomes on employee performance and health. Fostering employee well-being, job quality has been investigated with different theoretical perspectives as well as labor markets for its significance in creating meaningful jobs with higher employee motivation and job satisfaction (Burgess & Connell, 2008). The competitive pressures leading towards adoption of more flexible work arrangement in terms of part time or gig employment, low pay structures in challenged economic context and highly demanding jobs in the service and manufacturing sectors have been the primary determinants for researchers to focus job quality as an emerging research arena. An overview on HRM and job quality presented by Burgess & Connell (2008) is important where it discusses different contextual studies involving job quality from Australian and European labor markets with the challenging aspects of flexible working conditions, part time employment and demanding sector of nursing. However, the authors recommend to further conceptualize job quality by identifying determinants and monitoring it at national and international levels (Burgess & Connell, 2008). Despite increasing attention and interest of researchers and policy makers towards this aspect, there is a need to explore the reasons behind what constitutes a good or a bad job in challenged economic context.

Integration of Ergonomics into Job Design

Ergonomics entails the effect of physical environment on employee health and well-being and overall organizational performance (Jabbour, 2011). While ergonomics help to improve system efficiency by reducing waste, use of appropriate equipment and thorough design of workplace, also has a great potential in building sustainable industries, renewable products and distant communications through the use of technology. The recent Covid-19 pandemic has significantly altered the traditional work design models demanding to integrate technologically oriented systems that ensure safe and distant working while being productive. This practice shall bear huge impact on the demands to design workplaces with ergonomic consideration with employee physical health at its core (Colenberg et al., 2020). The common use of webinars, teleconferencing, telemedicine and various other technological products for data sharing and storing (Hanson, 2013) are some examples for job design scholars to look into for innovatively aligning ergonomic features and job design in order to bring improvement in human life at work.

Conceptualization and Design of Green Jobs

The literature defines green jobs as jobs in manufacturing or industrial sectors, research and development, administration and services that contribute to preserve environment (Littig, 2018). There has been a common debate for relating green jobs with manufacturing, energy and construction industries dealing with renewable energy and products (Bowen et al., 2018). However, there is a lack of a universal definition when it comes to define a green job. The common definition adopts an industrial perspective; whereas there has been a normative approach, derived from decent work agenda, adopted to corroborate the term. According to the normative

standpoint, green jobs are well paid jobs with career opportunities for employees contributing to improve overall environmental quality along with the quality of life for employee and family (Scully-Russ, 2013). Hence, the job design scholars must develop a nomenclature to define green jobs from a new perspective that is congruent to the decent work agenda, sustainable development and reflective of cultural context, since the rhetoric of life quality is subject to national policies, economic development and societal perceptions (Bowen et al., 2018). There is also a need to explore dimensions of work characteristics that are substantially needed to design a green job. Hence, the future researchers may require to focus on appropriate job design models in order to integrate sustainable or green dimensions into the job design from green perspective.

Designing Jobs for Improved Employee Health and Well-being

Employee health and well-being is the central focus of the decent work. The greater the need for meaningful jobs by the millennial workforce, higher is the demand for employee subjective well-being at work (Crego et al., 2020; Yi, 2013). Though research studies have revealed a positive correlation among mindfulness and meaning in life (Crego et al., 2020), there is a plausible association between the two through the presence of a mediating path with indirect effects on employee well-being. This is an important aspect for future researchers to provide statistical results proving the mediating relationship for explaining how meaningfulness may lead towards enhanced well-being. The inclusion of health and well-being into the SDGs also demand insights for policy interventions resulting into protective and preventive measures for promoting mental and physical well-being at individual, organizational and societal levels. The JDR model is the best suited for this purpose for several reasons. The overarching approach and flexible nature of the JDR model make it suitable to incorporate diverse occupational demands and resources and permit integration of novel moderating and mediating factors of technology, personality traits, psychosocial safety climate, for providing in depth explanation of the effects. Therefore, it demands methodological innovation for future researchers to explore the factors that may contribute to extend the job design model as well as provide empirical evidences for the effects and relationship.

6. CONCLUSION

This literature survey thoroughly scans the scholastic work of job design to gauge its evolution towards sustainability. Hence, this literature survey opens up new avenues of job design research with greater need for both qualitative as well as quantitative researches in order to establish the concept as well as furnish the empirical evidence for its effects. The transformed notion of decent work demands policy interventions in terms of labor regulations addressing fair wages, respectful work environment and sustainable employment opportunities to combat unemployment, discrimination and poverty at national levels. However, the government led policy directives must be translated into organizational HRM policies for effective implementation. As a primary initiative, the contemporary jobs must be designed with a sustainable focus integrating health, technology, engineering and economical disciplines together enabling organizations to contribute towards the SDG of decent work and economic growth. The study guides future researchers for theoretical advancements and framework development that incorporates environmentally focused responsibilities, behaviors and competencies into jobs for an improved environmental performance of organizations.

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