

A Systematic Review of Work Design: Impact on Employee Performance, Job Satisfaction, and Organizational Outcomes

Fika Rahmanita^{1*}, Ade Irma Anggraeni², Ratno Purnomo³

^{1*} Management Science Doctoral Student, Universitas Jenderal Soedirman, Indonesia,

^{2,3} Management, Universitas Jenderal Soedirman, Indonesia

Abstract

Work design is a key element in human resource management that focuses on designing and organizing tasks to improve employee performance and organizational results. This research conducted a systematic review of 20 international articles to investigate and understand concepts, theories and practices related to work design and their impact on employee performance, job satisfaction and organizational outcomes. The review results show that key elements in work design, such as skill variety, task identity, task significance, autonomy, and feedback, significantly increase employee motivation and engagement. Job characteristics theory, demand-control theory, and socio-technical systems approach are the main frameworks used in previous research to explain how work design can influence various aspects of work. In addition, new approaches such as job crafting and smart work design also show great potential in adapting work to individual employee needs and leveraging modern technology to create a more flexible and adaptive work environment. This research concludes that holistic and integrated job design can improve employee performance and well-being, as well as achieve better organizational outcomes. However, it is important for organizations to consider the balance between the benefits of technology and its impact on employee wellbeing. By understanding and implementing effective work design principles, organizations can create a productive and satisfying work environment, which ultimately supports overall business success.

Key words: Work design, Employee Performance, Job Satisfaction, and Organizational Outcomes

INTRODUCTION

Job design is a crucial aspect in human resource management and organizational development. In general, work design refers to the process of planning, organizing and

managing various work elements so that they are aligned with organizational goals and the needs of the individuals carrying out the work (Hoang & Le, 2024). The main goal of work design is to create work that is not only effective and efficient, but also psychologically satisfying for employees. In other words, work design seeks to combine organizational productivity with employee welfare (Wang et al., 2024).

The importance of work design is increasingly being recognized in the modern business world which is very dynamic and competitive. Technological changes, globalization, and changes in workforce expectations and needs require organizations to continue to adapt and develop appropriate work design strategies (Decius et al., 2023). Good job design can increase employee motivation, engagement and performance, as well as reduce turnover and absenteeism rates (Koohsari et al., 2022). Conversely, poor job design can cause dissatisfaction, stress, and various mental and physical health problems. In its implementation, work design involves various approaches and theories, such as job characteristics theory, demand-control theory, and socio-technical systems approach (Rieth et al., 2024). Job characteristics theory, for example, emphasizes the importance of dimensions such as skill variety, task identity, task significance, autonomy, and feedback in creating motivating jobs. Meanwhile, the demands-control theory highlights the balance between job demands and the control that employees have in carrying out their tasks (Parent-Rocheleau & Parker, 2022).

Job design is an important aspect of human resource management which focuses on how work is designed and structured to improve employee performance and achieve organizational goals. As technology develops and changes in labor market dynamics, understanding and implementing effective work design becomes increasingly important (Parent-Rocheleau & Parker, 2022). Good job design focuses not only on efficiency and productivity, but also on job satisfaction and employee well-being. Elements such as skill variety, autonomy, task identity, and feedback have been shown to play a crucial role in increasing employee motivation and engagement, which in turn has a positive impact on organizational performance.

Not only theory and approach, practical factors such as technology, organizational structure, and work culture also play an important role in work design (Scharp et al., 2022). Appropriate use of technology, for example, can increase work efficiency and accuracy, but can also introduce new challenges such as reduced human interaction and increased stress due to excessive monitoring (Chen et al., 2023). Therefore, work design must be carried out with a holistic approach, considering various aspects comprehensively to create an optimal work environment (Fasbender & Gerpott, 2023).

This research aims to investigate and understand concepts, theories and practices related to work design through a systematic literature review (SLR) approach. Through this method, research will comprehensively explore and analyze relevant literature to provide a comprehensive picture of how work design is implemented and has an impact in the organizational context (Montañez-Juan et al., 2023). First, this research aims to identify and categorize the main aspects of work design. By mapping the main components that make up work design, this research will highlight the theories, models and approaches that have been used in previous research. This will provide a strong basis for understanding the important elements that must be considered in job design (Mharapara et al., 2022). Second, this research focuses on assessing the impact of work design on employee well-being and performance (Kiffin-Petersen, 2015). Through analysis of existing literature, this research will evaluate how various elements in work design, such as skill variety, task identity, task significance, autonomy, and feedback, influence employee motivation, engagement, productivity, and mental and physical health (Caracuzzo et al., 2024).

LITERATURE ANALYSIS AND METHODOLOGY

Work Design

Work design, or job design, is a systematic process for planning, organizing and managing work elements so that they are aligned with organizational goals and the needs of the individuals carrying out the work. This process involves identifying and organizing various job components, such as tasks, roles, responsibilities, and interactions between employees, with the goal of creating a productive and satisfying work environment. Work design aims to achieve a balance between operational efficiency and employee welfare, which can ultimately improve the overall performance of the organization (Ajgaonkar et al., 2022).

One of the main theories in work design is the job characteristics theory put forward by Hackman and Oldham in 1976. This theory highlights five core dimensions that can influence employee motivation and job satisfaction, namely skill variety, task identity, task significance, autonomy, and feedback. Skill variety refers to the use of various skills and abilities in carrying out work, task identity relates to the extent to which employees can see the end result of their work, while task significance describes the importance of the work to others. Autonomy gives employees freedom to organize and carry out their work, and feedback is information regarding performance received by employees (Terhoeven et al., 2022).

Apart from job characteristics theory, there are other approaches such as the demand-control theory developed by Karasek. This theory emphasizes the balance between

work demands and the control that employees have in carrying out their duties (Niehues et al., 2024). According to this theory, jobs that have high demands but low control tend to cause stress and dissatisfaction, while jobs with high control can increase feelings of satisfaction and well-being. This approach shows the importance of giving employees sufficient control in their work to achieve an optimal balance between demands and available resources (Schulze-Meeßen & Hamborg, 2023). Work design is also influenced by the socio-technical systems approach, which emphasizes the importance of considering the interaction between social and technical aspects in the work environment. This approach focuses on how technology, organizational structure, and human relationships can be arranged in such a way as to increase employee efficiency and well-being. By considering these factors, work design aims to create a work system that is not only technically effective, but also socially and psychologically satisfying for employees, resulting in a holistic and harmonious work environment (Przybyłek & Więckowski, 2022).

RESEARCH METHODS

The Systematic Literature Review (SLR) approach using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analysis) method was applied in this research systematically by following the correct research stages. This research method is used to identify, evaluate, and interpret all relevant research findings related to the research question, topic, or phenomenon of interest (Bouncken et al., 2023).

RESULTS

1. Search Process

The literature search in this study was carried out using the Google Scholar, DOAJ, and Science Direct databases. The keywords used in the article search are leadership style and millennial generation. The selected articles are national and international articles published between 2015 and 2024. After a sample of articles was obtained, the articles were selected and then analyzed to collect relevant information. The process of analyzing and synthesizing data from articles is carried out descriptively to observe, explain and categorize data with the aim of generating knowledge from the themes explored in the metasynthesis.

Research questions are created according to the needs of the topic chosen in this research. The following are the research questions used:

RQ1: Investigate and understand concepts, theories and practices related to work design.

RQ2: Models and approaches that have been used in previous research.

2. Inclusion and Exclusion Criteria

The inclusion and exclusion criteria used to guide the search and selection of articles are articles published in national and international journals for the 2015-2024 period, indexed in the database used, as well as data relating to the role of leadership style in the performance and job satisfaction of the millennial generation.

3. Quality of Assessment

Research quality assessment criteria can be used to guide the interpretation of synthesis findings and help determine the conclusions described. Some questions used to evaluate research quality include:

1. Was the journal article published between 2015-2024?
2. Does the journal article reveal information that is useful for developing an analysis of the role of leadership style in the performance and job satisfaction of the millennial generation?
3. Are journal articles indexed articles?

From these questions, an assessment was then carried out on each journal article selected in this research:

1. "Yes" for journal articles that meet the quality assessment criteria.
2. "No" for journal articles that do not meet the quality assessment criteria.

4. Data Analysis and Data Extraction

The selected primary studies were then extracted to collect data that contributed to answering the research questions.

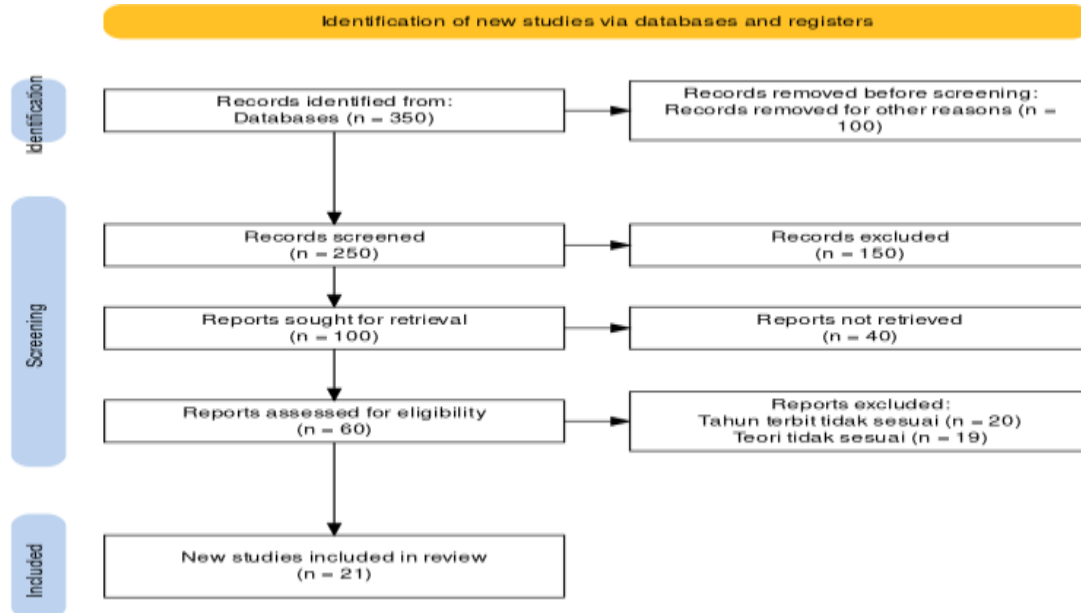


Figure 1. PRISMA Flowchart

Search Process Results and Inclusion and Exclusion Criteria

From the search and selection process for inclusion and exclusion criteria, 20 journal articles were found that met the publication criteria in this research, namely journal articles that met the criteria for journal articles published in national and international journals for the 2016-2024 period, indexed in the database used, and The data used relates to the role of leadership style in the performance and job satisfaction of the millennial generation.

Table 1. Grouping Based on Journal Type

No	Journal	Year	Quantity
1	<i>Procedia Computer Science</i>	2024	1
2	<i>Journal of Business Research</i>	2024	1
3	<i>International Journal of Industrial Ergonomics</i>	2023	1
4	<i>Current Research in Behavioral Sciences</i>	2024	1
5	<i>Human Resource Management Review</i>	2022	1
6	<i>Heliyon</i>	2023	1
7	<i>Applied Ergonomics</i>	2023	1
8	<i>Journal of Vocational Behavior</i>	2022	3

9	<i>International Journal of Human-Computer Studies</i>	2024	1
10	<i>Procedia CIRP</i>	2022	1
11	<i>Women and Birth</i>	2022	1
12	<i>Journal of Business Research</i>	2023	1
13	<i>Building and Environment</i>	2022	1
14	<i>Case Studies in Construction Materials</i>	2022	1
15	Management Research Review	2024	1
16	New Ways of Studying Emotions in Organizations	2015	1
17	The TQM Journal	2021	1
18	Journal of Service Theory and Practice	2018	1

Quality Assesment

Table 2. Results of quality assessment (Quality Assessment)

No	Author	Year	QA1	QA2	Result
1	Sina Niehues, Fatemeh Shahinfar, Markus Harlacher, Stephan Sandrock	2024	Yes	Yes	Accepted
2	Dan Wang, Ross Donohue, Feng Guo, Mingjun Yang, Tuan Luu	2024	Yes	Yes	Accepted
3	Maribel Montañez-Juan, M. Esther García-Buades, José M. Peiró, Beatriz Sora, Silvia Ortiz-Bonnin, Amparo Caballer	2023	Yes	Yes	Accepted
4	Thu-Hang Hoang, Quynh Hoa Le	2024	Yes	Yes	Accepted
5	Xavier Parent-Rocheleau, Sharon K. Parker	2022	Yes	Yes	Accepted
6	Xuelin Chen, Abdullah Al Mamun, Mohammad Enamul Hoque, Wan	2023	Yes	Yes	Accepted

	Mohd Hirwani Wan Hussain, Qing Yang				
7	Leonore Schulze-Meeßen, Kai-Christoph Hamborg	2023	Yes	Yes	Accepted
8	Yuri S. Scharp, Arnold B. Bakker, Kimberley Breevaart	2022	Yes	Yes	Accepted
9	Julian Decius, Niclas Schaper, Katharina Klug, Andreas Seifer	2023	Yes	Yes	Accepted
10	Michèle Rieth, Linda Onnash, Vera Hagemann	2024	Yes	Yes	Accepted
11	Jan Terhoeven, Patricia Tegemeier, Sascha Wischniewski	2022	Yes	Yes	Accepted
12	Tago L. Mharapara, Nimbus Staniland, Matthias Stadler, Janine H. Clemons, Lesley Dixon	2022	Yes	Yes	Accepted
13	Ricarda B. Bouncken, Muhammad Mahmood Aslam, Till Marius Gantert, Andreas Kallmuenzer	2023	Yes	Yes	Accepted
14	Mohammad Javad Koohsari, Gavin R. McCormack, Tomoki Nakaya, Ai Shibata, Kaori Ishii, Chien-Yu Lin, Tomoya Hanibuchi, Akitomo Yasunaga, Koichiro Oka	2022	Yes	Yes	Accepted
15	Grzegorz Przybyłek, Jędrzej Więckowski	2022	Yes	Yes	Accepted

16	Ulrike Fasbender, Fabiola H. Gerpott	2023	Yes	Yes	Accepted
17	Emanuela Caracuzzo, Andrea Caputo, Antonino Callea, Claudio Giovanni Cortese, Flavio Urbini	2024	Yes	Yes	Accepted
18	Sandra Kiffin-Petersen	2015	Yes	Yes	Accepted
19	Suchitra Ajgaonkar, Netra Neelam, Abhishek Behl, Le Trung Dao, Le Dang Lang	2021	Yes	Yes	Accepted
20	Ji "Miracle" Qi, Alexander E. Ellinger, George R. Franke	2018	Yes	Yes	Accepted

RQ1: Investigate and understand concepts, theories and practices related to work design.

The results of a systematic literature review involving 20 international articles on work design reveal that the concepts, theories and practices of work design vary greatly, but have several consistent core elements. The work design concept generally focuses on arranging tasks and work roles to improve organizational efficiency and employee welfare. Most articles highlight the importance of factors such as skill variety, task identity, task significance, autonomy, and feedback as key components of effective work design. The job characteristics theory proposed by Hackman and Oldham (1976) is often the main basis in these studies, demonstrating the continuing relevance and influence of this theory in work design practice. Apart from job characteristics theory, demand-control theory and the socio-technical systems approach are also often mentioned in the literature. The demands-control theory developed by Karasek highlights the importance of balance between job demands and the control that employees have, showing that jobs with high demands but low control can cause stress and dissatisfaction. The socio-technical systems approach, on the other hand, emphasizes the interaction between social and technical aspects of the work environment, suggesting that good integration between technology and human relations can create a more efficient and satisfying work environment. These two theories offer complementary frameworks and can be used together to develop more holistic job designs.

In terms of work design practices, the literature shows that implementing the main elements of work design can increase employee motivation, engagement and performance,

as well as reduce turnover and absenteeism. Several studies show that modern technology plays an important role in supporting flexible and adaptive job design. For example, the use of information and communications technology enables remote work and flexible working arrangements, which can improve the balance between employees' work and personal lives. However, the literature also highlights the challenges associated with implementing technology, such as the risk of social isolation and stress from excessive monitoring. Therefore, an effective work design approach must consider the balance between the benefits of technology and its impact on employee well-being.

RQ2: Models and approaches that have been used in previous research.

Research on work design has developed various models and approaches used to understand and implement effective work design. One of the most influential models is the job characteristics theory (Job Characteristics Theory) proposed by Hackman and Oldham in 1976. This theory emphasizes five core dimensions that influence employee job satisfaction and motivation: skill variety, task identity, task significance, autonomy, and feedback. According to this theory, a well-designed job will have these five dimensions, which in turn will increase intrinsic motivation, job satisfaction, and employee performance.

Apart from job characteristics theory, the demand-control theory developed by Karasek also plays an important role in work design research. This theory focuses on the balance between job demands and the control that employees have in carrying out their tasks. According to this theory, jobs with high demands but low control tend to cause stress and job dissatisfaction, while jobs with high control can increase employee satisfaction and well-being. Research shows that increasing employee control over their work can reduce stress and improve performance.

The socio-technical systems approach (Sociotechnical Systems Approach) is another approach that is often used in work design research. This approach emphasizes the importance of considering the interaction between social and technical aspects in the work environment. This means that technology, organizational structure, and relationships between employees must be arranged in such a way as to create an efficient and satisfying work system. This approach highlights that good integration between technology and social elements can increase employee productivity and well-being, taking into account group dynamics and individual needs.

Apart from the models and approaches above, work design research also includes newer approaches such as job crafting and smart work design. Job crafting is the process by which employees proactively change aspects of their jobs to better suit their skills, interests, and needs. Research shows that job crafting can increase motivation and job satisfaction, as well



as reduce burnout. Smart work design, on the other hand, integrates modern technology to create more flexible and adaptive work, enabling work arrangements that are more dynamic and responsive to changing organizational and employee needs. This approach emphasizes the importance of balancing the benefits of technology and its impact on employee well-being.

CONCLUSION AND RECOMMENDATIONS

The results of a systematic literature review on work design show that effective job design plays a key role in improving organizational performance and employee well-being. Through various models and approaches, such as job characteristics theory, demands-control theory, and socio-technical systems approach, research has identified the main elements that influence motivation, engagement, and job satisfaction. Skill variety, task identity, task significance, autonomy, and feedback are proven to be important components to consider in designing jobs. These approaches provide a comprehensive framework for understanding and implementing work design that can optimize employee productivity and well-being.

Apart from that, adaptation to technological developments and changes in organizational needs is also an important focus in modern work design. Approaches such as job crafting and smart work design offer innovative ways to match jobs to employees' individual skills and needs, as well as integrating technology to create flexible and adaptive work environments. However, it is important to strike a balance between the benefits of technology and its negative impact on employee well-being. Overall, the research shows that holistic and integrated work design can help organizations achieve their business goals while ensuring employee well-being and satisfaction.

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