

Antecedents and Consequences of Employee Engagement in the Digital Era

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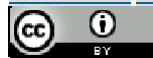
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ABSTRACT

The study intends to be a model of employee engagement in the digital era. The term "digital" is related with its evolution. Aspects of the study included the pattern of the grand theory employed, the pattern of the unit of analysis, the pattern of the antecedents and effects of employee engagement, the pattern of methodologies and techniques employed, and research gaps that must be addressed in the future. ScienceDirect and Sage Open Journal data were used. The filtering used rayyan.ai and thematic reading with Nvivo 12 plus, resulted in the discovery of 22 relevant publications. As a result, there is a need to investigate cross-management impacts, larger environmental influences, and gender issues. Search engine constraints, a lack of detail in describing gaps, and the degree of effect are all mentioned. Future research areas were also indicated, including the need for meta-analysis and more detailed study on the given gap patterns

INTRODUCTION

Employee engagement requires attention, particularly as the world moves toward digital transformation. In practically all processes, a key development is the growing interaction or choice between labor and technology. The ramifications of this have two sides, notably risks and opportunities for employees who participate. The risks of digitalization include rationalization and lower career levels, diminished worker interactions, more autonomy, and training connected to the complexity and rigidity of technology. Opportunities associated with digitalization include increased work meaning, a plethora of learning resources, information availability, transparency, and expanded technological connections. These two sides are crucial in terms of employee engagement patterns.

Employee culture is changing as a result of digitization. Digitalization is linked to the industrial revolution 4.0. This word has been in use since 2016, however, the practice dates back to 2011. This revolution pervades many areas, including the economic, corporate, political, and social. Efficiency, global connectivity, and transparency are becoming more prevalent. Workers' participation in the firm and work is influenced by this culture on the business side. This is connected to the function of workers, namely as a driver and source of innovation for the organization with the technology used.

Attachment is defined variously by different experts. Employee engagement is defined as a sense of well-being, emphasis on corporate goals, and compliance to the work environment described the emotional condition of employees who are enthusiastic, active, and engaged to their work. [4] described it as a process and result of employee personal participation in the firm's performance, the link between personal and company ambitions. A strong and pleasant feeling or emotion to attain organizational goals is an element of participation.

Because of the high probability of failure to meet goals in digital transformation, employee participation is becoming increasingly important in the digital era. The failure rate from performance factors and associated employee aspects was presented by and The failure rate for attaining the goals of customer proximity and efficiency is 70%, followed by performance and sustainability at 93% (from 30% who perform). The human dimensions of this failure include poor threat management and a tendency to disregard employee ideas and ambitions. This occurs despite the fact that technology is becoming more accessible. This demonstrates the significance of examining research on the causes and implications of worker participation in the digital age.

A systematic literature review includes methods, synthesis, and multiple pieces of literature that may be accounted for identified six study elements: defining questions, gathering acceptable research, analyzing research reports, synthesizing, and establishing evidence. The previous review confirmed that there are issues that need to be investigated further, specifically what engagement model is appropriate for the digital era, both in terms of the grand theory used, unit of analysis, moderating effects for employee engagement, antecedents or consequences, and methods and techniques used. These six (six)

components help to clarify the study's future course. The data included in the research is based on research breakthroughs connected to the digital revolution from 2015 to 2022.

THEORITICAL REVIEW

Norman introduced the concept of affordance to describe the “human-computer interaction” that helps the utilization of objects. The “interaction” that is the focus of Affordance is responsible for describing the relationship between users and the technology used in their organizations. Digital transformation studies have been applied in various fields using this concept. The argument put forward by Vyas et al is that simulations can be carried out using digital technology, but users must first understand the capabilities of the technology. Vyas et al identify “three levels of costs: individual user, management level, and community”. They added: “Relationships can be one-to-one, i.e. a particular user and technology (individual level), one-to-many (organization), or many-to-many (community level).

Digital technological capabilities, design trends, and infrastructure influence the economy by increasing technological facilities for work and social. Li., Su., Zhang, and Mao investigated the digital transformation of small and medium enterprises using dynamic management capabilities. Dynamic management capabilities (DMC) theory considers “managers' abilities to create, integrate and adapt organizational resources and capabilities”. This increases managers' ability to drive your company's digital transformation initiatives. According to current literature, DMC is based on three main components: “management knowledge, management social capital, and management human capital”. Managerial awareness focuses on managers' “personal beliefs” and “mental models” that support decision making. It refers to managers' knowledge and understanding of current events that inform their decisions. Managers with limited management experience may be unaware of changes and hinder their company's change efforts.

Organizational social capital consists of “formal and informal relationships between managers and other parties”. Managerial human capital is the knowledge, experience, skills and knowledge of individual managers and groups of managers. For example, companies in dynamic environments require good market intelligence and research and development (RandD) capabilities to gain competitive advantage in the technology industry. Chopra and Sodhi note that channel management activities are important to compete in traditional retail market segments. It can be said that after a change in direction, the company must have the ability to enter new businesses or compete in new markets.

Involved Grand Theory

The underlying principle of the research has several directions. Some concentrate on practice without discussing the fundamental philosophy, job demand resources model, combination, natural resources based, self-determination theory, signaling theory, social exchange theory, social

identification theory, the resources based theory dan the service marketing triangle.

The visual pattern is as follows:

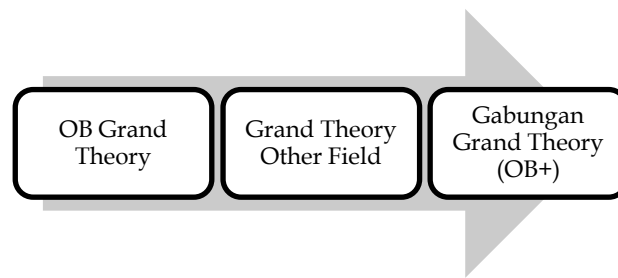


Figure 2: Directions for Using Grand Theory in Employee Engagement Research

Source: Processed Data

Unit of Analysis

The units of analysis used in the paper sample were individual, company level, and combined. The bulk of analytical units were based on individuals. A related area that has received little attention is the combined individual, group and collective level analysis carried out. Regarding the company level, employee engagement is still low in small and medium companies, only research from For small and medium-sized businesses, the combined and company level are the future mainstream units of analysis.

METHODOLOGY

This study followed the technique of which consists of six parts. In the introduction, questions have been clarified. The research was gathered utilizing peer-reviewed article criteria and the phrase employee engagement. Based on study by the database utilized for main quality includes the ScienceDirect search engine, as well as Sage Open Journal.

The analytical tool was rayyan.ai. developed Rayyan.ai, a web tool to aid with systematic literature reviews. The program investigates the author's keywords. This keyword research aids in the discovery of publications that simply feature the core study of employee engagement. Of course, only articles with primary data were considered. The results were chosen journals for further examination. Then, to assist analysis and data collection, count the number of articles that contained words (in this case, variables based on the research question).



Figure 1: Vocabulary Mode in 853 Early Journals

Source: Processed data

The term employee engagement yielded 757 journals on ScienceDirect and 96 journals from Sage Open Journal in the initial search results. Figure 1 indicates that there are words other than objective that have the same definitions, such as work engagement, job engagement, and others. Using rayyan.ai and reviewing the abstract, selecting the phrase employment engagement yielded 71 articles containing employee engagement. Of course, publications involving primary data rather than literature review papers.

Further study using NVIVO 12 plus decreased the number of publications involved. Initially, this program was simply used to help with coding to solve research problems. Some journal publications may not explicitly mention employee involvement. Aside from that, there were articles that were just appropriate for detailing employment circumstances. So, the total number of articles that were further evaluated was 22.

Table 1: Journal Study Directions

No Study

1	Business
2	Hospitality
3	Operation management
4	Public Management
5	Nursing
6	Agro Industry

Source: Processed data

RESULTS

Table 1 shows the direction of the study of the journals participating in sequence. Employee engagement research often focused on six topics. The majority of studies were undertaken in the business sector as a whole. The hospitality industry, which includes hotels and similar enterprises, was ranked second. There were other studies addressing the agricultural industry, as well as public administration and nursing. This implies that in the realm of professionalism, employee engagement is a major problem.

Employee engagement can play a variety of roles in the research under consideration. For starters, this variable might be a result of other factors. Both locations are variables that are affected by other factors. There is also research on whether there are elements that boost or diminish the effect on employee engagement. Other variables can be moderated by employee engagement. The specifics will be disclosed later.

Antecedent of Employee Engagement

Employee engagement is influenced by variables relating to psychology, organizational behavior, features of operations management, and even marketing, communication, entrepreneurship, customer social responsibility, and gender. *Figure 1* depicts the structure of research on employee engagement in scientific domains ranging from human resources to a mix of cross-disciplinary subjects. The bulk of research focus on organizational behavior and psychology, which are usually combined into one subject of science. On the one hand, another topic that requires emphasis in future studies is cross-sector integration.

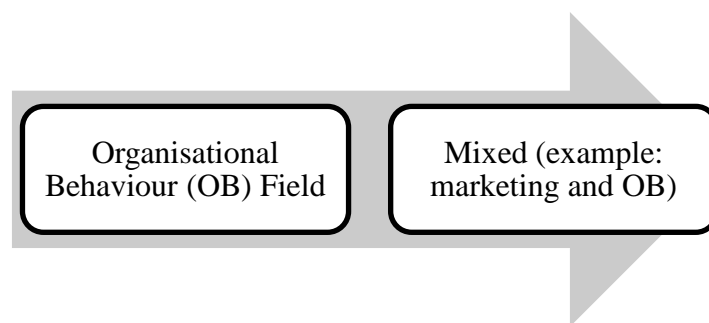


Figure 1: Future Directions Study of Employee Engagement Antecedents

Source: Processed data

The two largest studies have more specific factors. Ego resilience, self-efficacy, a supportive organizational atmosphere, and good affect are all aspects of the psychological side of things personal character dan religiosity secondary traumatic stress and psychology capital The organizational behavior side involves basic need satisfaction burnout dan experience family support job

crafting job insecurity work life balance, job performance dan leadership job resources, job satisfaction, perceived environmental support.

Consequences of Employee Engagement

Employee engagement has general consequences for aspects of human resources. Several studies use this aspect variable, namely Desire to have a Significant Impact through Work (DSIW), job performance, organizational pride, retention, task performance, turnover intention, employee buy-in. Employee engagement research also investigates the impact of entrepreneurial-related consequences on marketing and business performance, specifically business performance and customer behavior intentions. This means, as shown in Figure 4, the focus on cross-effects is a prospective direction for employee engagement research.

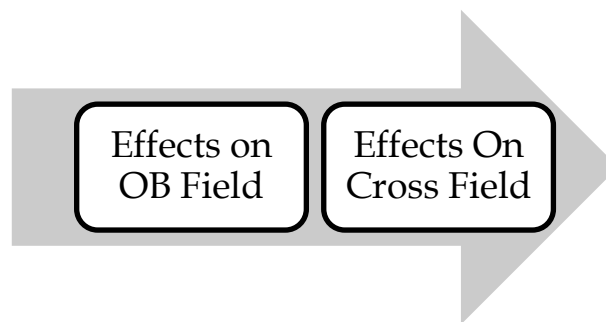


Figure 4: Directions for Studying the Consequences of Employee Engagement

Source: Processed data

Moderating Effects for Employee Engagement

Other variables besides elements of organizational behavior (OB) can moderate research on the effect of antecedent variables investigated factors that moderate the OB antecedents of employee engagement, namely relationships and job demands. The political component, gender and corporate reputation were also conducted. The direction of the moderation study on employee engagement is as shown in Figure 5.

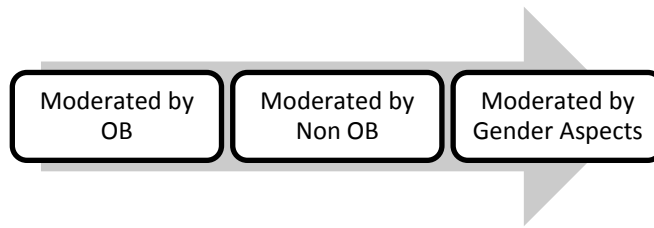


Figure 2: Direction of Moderation Study on Employee Engagement

Methods and Technique

Figure 6 depicts the methods and techniques used in the example journal in three orientations. The researchers' overall orientation is the first kind, which used only one technique. The second and third categories receive the least attention. The second is a mixture of qualitative and quantitative data. The third type of study is using multiple levels of analysis at individual, group and organizational levels. Effects studies include not just regression but also a variety of testing procedures, both parametric and non-parametric. This suggests that the study is very concerned with the consequences in general and at each level.

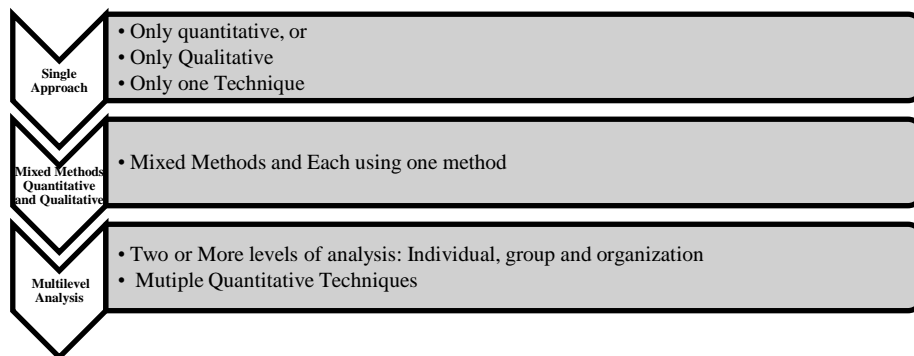


Figure 6: Direction of Analysis Methods and Techniques

Source: Processed data

In terms of the nature of variables, namely latent characteristics, sample article research employed a variety of methodologies. Structural equation modeling (SEM) with a covariance basis is the first technique. The second approach is with component-based SEM. The third approach begins with factor analysis and then use regression. SEM incorporates extra variables into calculations. Figure 7 depicts the third approach, which is more semi-integrated. The most popular method is to employ component-based SEM.



Figure 3: Third approach analysis stage

Research Gap

The discussion of research gaps is meant to provide a general direction for future research on employee engagement. According to the significant background discussed, the details of the gap deserve additional investigation. The general gap is the investigation of the impact of employee engagement on other aspects of management. The effect of other managerial domains on employee engagement is the second gap. The influence of other environmental elements such as politics and social issues is the third gap. The need to control gender dimensions of employee engagement is the fourth gap. The occurrence of numerous levels in research relating to this variable is the fifth gap. In essence, the disparity seen in Figure 8 is due to the interaction of management, gender, and larger environmental variables (business, economic, and social).

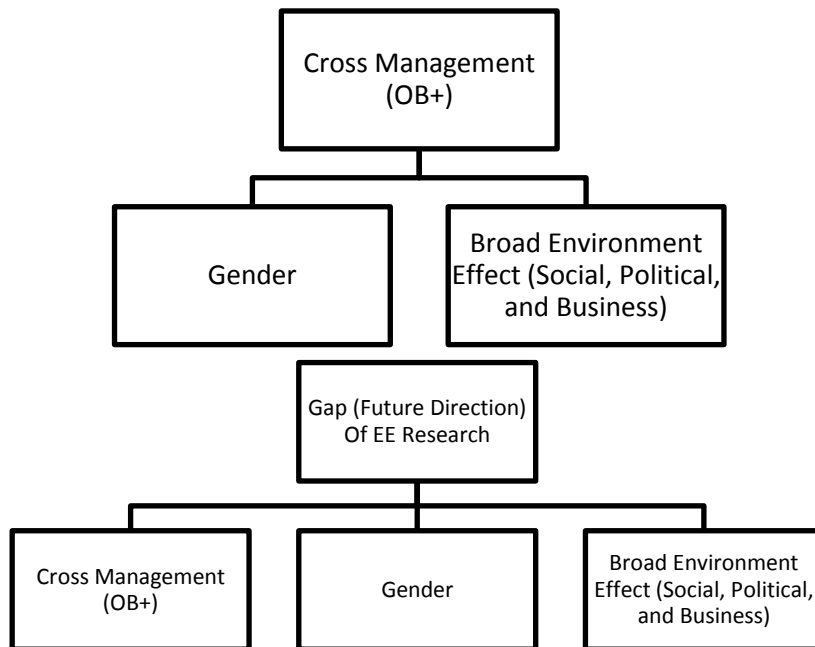


Figure 8: Research Gap in Employee Engagement

Source: Processed Data

Research Limitations and Future Research Directions

Several points to consider are some of the study's limitations. There are now just two search engines, ScienceDirect and Sage Open Journal. This study is broad in scope and does not address particular gaps. There is no discussion of the direction of influence or the strength of influence. The overall direction of employee engagement research, on the other hand, may be mapped and is expected to be relevant to wider investigations.

It is expected that future study will go numerous directions. To begin, meta-analysis research on particular and key areas of employee engagement might be conducted. Second, more focused study on certain key factors could potentially be undertaken. The goal of future study is to identify research gaps in the field of management connected to employee management.

CONCLUSIONS AND RECOMMENDATIONS

1. Existing grand theories focus on organizational behavior, while others employ other subjects or a mix of organizational behavior and other domains.
2. The most common units of analysis are individuals, businesses, and joint ventures. The number of small and medium-sized businesses remains low.
3. Antecedents include not just organizational behavior factors, but also cross-disciplinary or managerial variables.
4. Employee engagement may have an impact on both organizational behavior and cross-sector issues.
5. Employee engagement can be moderated by organizational behavior factors and other sectors, as well as gender characteristics.
6. The majority of methods and techniques follow a single approach, with a combination of quantitative and quantitative, as well as multiple level analysis.
7. The gap is often focused on employee engagement research across management areas, broader environmental consequences, and gender issues.

FURTHER STUDY

Every research is subject to limitations; thus, you can explain them here and briefly provide suggestions to further investigations.

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REFERENCES

- A. Behl, N. Jayawardena, A. Ishizaka, M. Gupta, and A. Shankar, "Gamification and gigification: A multidimensional theoretical approach," *J. Bus. Res.*, vol. 139, pp. 1378–1393, Feb. 2022, doi: 10.1016/j.jbusres.2021.09.023.
- A. Hartwig, S. Clarke, S. Johnson, and S. Willis, "Workplace team resilience: A systematic review and conceptual development," *Organ. Psychol. Rev.*, vol. 10, no. 3–4, pp. 169–200, 2020, doi: 10.1177/2041386620919476.
- A. Joseph, S. Gupta, Y. C. Wang, and K. Schoefer, "Corporate rebranding: An internal perspective," *J. Bus. Res.*, vol. 130, pp. 709–723, Jun. 2021, doi: 10.1016/J.JBUSRES.2020.04.020.
- B. Tabrizi, E. Lam, K. Girard, and V. Irvin, "Digital Transformation Is Not About Technology." <https://hbr.org/2019/03/digital-transformation-is-not-about-technology> (accessed Dec. 29, 2023).
- D. Gough, S. Oliver, and J. Thomas, *An Introduction to Systematic Reviews*.
- E. Bridger, "Employee engagement : a practical introduction," p. 254, Accessed: Dec. 29, 2023. [Online]. Available: <https://www.perlego.com/book/1589702/employee-engagement-a-practical-introduction-pdf>
- H. De la Boutetière, A. Montagner, and A. Reich, "The keys to a successful digital transformation | McKinsey", Accessed: Dec. 29, 2023. [Online]. Available: <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/unlocking-success-in-digital-transformations>
- H. J. (Annette) Kang and J. A. Busser, "Impact of Service Climate and Psychological Capital on Employee Engagement: The Role of Organizational Hierarchy," *Int. J. Hosp. Manag.*, vol. 75, p. 1, Mar. 2018, doi: 10.1016/j.ijhm.2018.03.003.
- H. J. Gordon, E. Demerouti, P. M. Le Blanc, A. B. Bakker, T. Bipp, and M. A. M. T. Verhagen, "Individual job redesign: Job crafting interventions in healthcare," *J. Vocat. Behav.*, vol. 104, pp. 98–114, Feb. 2018, doi: 10.1016/J.JVB.2017.07.002.
- I. Ali, M. Ali, G. Grigore, M. Molesworth, and Z. Jin, "The moderating role of corporate reputation and employee-company identification on the work-related outcomes of job insecurity resulting from workforce localization

- policies," *J. Bus. Res.*, vol. 117, pp. 825–838, Sep. 2020, doi: 10.1016/J.JBUSRES.2019.02.060.
- J. A. Busser, L. V. Shulga, H. J. (Annette) Kang, and D. H. Ramirez Molintas, "The Effect of Hospitality Conference Messaging on Employee Job Responses," *Int. J. Hosp. Manag.*, vol. 78, p. 1, Oct. 2018, doi: 10.1016/j.ijhm.2018.09.011.
- J. Breugh, "Too Stressed To Be Engaged? The Role of Basic Needs Satisfaction in Understanding Work Stress and Public Sector Engagement," *Public Pers. Manage.*, vol. 50, no. 1, pp. 84–108, Mar. 2021, doi: 10.1177/0091026020912516.
- K. C. Chang, "Effect of servicescape on customer behavioral intentions: Moderating roles of service climate and employee engagement," *Int. J. Hosp. Manag.*, vol. 53, pp. 116–128, Feb. 2016, doi: 10.1016/J.IJHM.2015.12.003.
- M. Aboelmaged, "The drivers of sustainable manufacturing practices in Egyptian SMEs and their impact on competitive capabilities: A PLS-SEM model," *J. Clean. Prod.*, vol. 175, pp. 207–221, Feb. 2018, doi: 10.1016/J.JCLEPRO.2017.12.053.
- M. Gusenbauer and N. R. Haddaway, "Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources," *Res. Synth. Methods*, vol. 11, no. 2, pp. 181–217, Mar. 2020, doi: 10.1002/JRSM.1378.
- M. Hartwig, M. Wirth, and D. Bonin, "Insights about mental health aspects at intralogistics workplaces – A field study," *Int. J. Ind. Ergon.*, vol. 76, p. 102944, Mar. 2020, doi: 10.1016/J.ERGON.2020.102944.
- M. Hartwig, M. Wirth, and D. Bonin, "NC-ND license Insights about mental health aspects at intralogistics workplaces-A field study," *Int. J. Ind. Ergon.*, vol. 76, pp. 169–8141, 2020, doi: 10.1016/j.ergon.2020.102944.
- M. Ouzzani, H. Hammady, Z. Fedorowicz, and A. Elmagarmid, "Rayyan-a web and mobile app for systematic reviews," *Syst. Rev.*, vol. 5, no. 1, pp. 1–10, Dec. 2016, doi: 10.1186/S13643-016-0384-4/FIGURES/6.
- M. S. Farooq and M. Salam, "Cleaner production practices at company level enhance the desire of employees to have a significant positive impact on society through work," *J. Clean. Prod.*, vol. 283, p. 124605, Feb. 2021, doi: 10.1016/J.JCLEPRO.2020.124605.

- M. S. Farooq and M. Salam, "Nexus between CSR and DSIW: A PLS-SEM Approach," *Int. J. Hosp. Manag.*, vol. 86, p. 102437, Apr. 2020, doi: 10.1016/J.IJHM.2019.102437.
- N. S. Al Kahtani and S. M. M, "A Study on How Psychological Capital, Social Capital, Workplace Wellbeing, and Employee Engagement Relate to Task Performance," *SAGE Open*, vol. 12, no. 2, Apr. 2022, doi: 10.1177/21582440221095010.
- P. T. Durst, S. J. Moore, C. Ritter, and H. W. Barkema, "Evaluation by employees of employee management on large US dairy farms," *J. Dairy Sci.*, vol. 101, pp. 7450-7462, 2018, doi: 10.3168/jds.2018-14592.
- R. Khan, J. P. Neveu, G. Murtaza, and K. U. Khan, "Impact of Psychological Resources on Employee Engagement: The Mediating Role of Positive Affect and Ego-Resilience," *SAGE Open*, vol. 12, no. 2, pp. 21582440221089972-21582440221089972, Apr. 2022, doi: 10.1177/21582440221089971.
- R. Yadav, R. Gangwar, S. Arora, and F. Andres, "IRMA-International.org: Cultural Issues in Employee Engagement: Illuminate, Causes, and Significance." <https://www.irma-international.org/chapter/cultural-issues-in-employee-engagement/221398/> (accessed Dec. 29, 2023).
- S. Flanders, D. Hampton, P. Missi, C. Ipsan, and C. Gruebbel, "Effectiveness of a Staff Resilience Program in a Pediatric Intensive Care Unit," *J. Pediatr. Nurs.*, vol. 50, pp. 1-4, Jan. 2020, doi: 10.1016/J.PEDN.2019.10.007.
- T. Hameduddin and H. Lee, "Sexual Harassment and Employee Engagement: Exploring the Roles of Gender, Perceived Supervisory Support, and Gender Equity Climate," <https://doi.org/10.1177/0734371X221095404>, vol. 43, no. 3, pp. 504-527, May 2022, doi: 10.1177/0734371X221095404.
- T. Hameduddin, "Employee Engagement Among Public Employees: Exploring the Role of the (Perceived) External Environment," *Am. Rev. Public Adm.*, vol. 51, no. 7, pp. 526-541, Sep. 2021, doi: 10.1177/02750740211010346/ASSET/IMAGES/LARGE/10.1177_02750740211010346-FIG4.JPEG.
- T. Maylett, "Chapter One: Myths of Engagement," *Engagem. MAGIC Five Keys Engag. People, Leaders, Organ.*, 2019, Accessed: Dec. 29, 2023. [Online]. Available: <https://www.perlego.com/book/866958/engagement-magic-five-keys-for-engaging-people-leaders-and-organizations-pdf>

- T. Philbeck and N. R. Davis, "The Fourth Industrial Revolution: Shaping a New Era," *J. Int. Aff.*, 2018.
- U. Ahmed, W. A. Umrani, U. Zaman, S. M. Rajput, and T. Aziz, "Corporate Entrepreneurship and Business Performance: The Mediating Role of Employee Engagement," *SAGE Open*, vol. 10, no. 4, 2020, doi: 10.1177/2158244020962779.
- Y. A. Iddagoda and H. H. D. N. P. Opatha, "Relationships and Mediating Effects of Employee Engagement: An Empirical Study of Managerial Employees of Sri Lankan Listed Companies," *SAGE Open*, vol. 10, no. 2, Apr. 2020, doi: 10.1177/2158244020915905/ASSET/IMAGES/LARGE/10.1177_2158244020915905-FIG10.JPEG.
- Y. Bhattacharya, "Employee Engagement as a Predictor of Seafarer Retention : A Study among Indian Officers," 2015.
- Y. Fukuoka, "Oligarchy and democracy in post-suharto indonesia," *Polit. Stud. Rev.*, vol. 11, no. 1, 2013, doi: 10.1111/j.1478-9302.2012.00286.x.