

The Determinants of Employee Engagement: A Systematic Review

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Abstract: *Engaged employees direct their vigor and dedication toward their work, and become absorbed in it. This systematic literature review will synthesize employee engagement determinants, irrespective of industry and country. A PRISMA-informed review with narrative synthesis was conducted on English-language publications from 1 January 2015 to 31 December 2025. It retained 66 publications. Inductive coding generated thirteen determinant domains: Job Resources, Job Demands, Leadership, Organizational Support, Autonomy, Meaningful Work, Job Crafting, Personal Resources, Justice/Trust, HR Practices, Social Support, Work Climate, and Digital Conditions. Personal Resources and Leadership were the most researched determinants, however, no determinant was present in 60% or more of the included studies, indicating an diffused evidence base. The evidence was most catan to resource-rich work design, supportive leadership, autonomy, meaningfulness, organizational support, and positive job crafting. Digital conditions and other contextual mechanisms are still emerging. The synthesis supports the use of multilevel engagement strategies to enhance structural and relational resources. Longitudinal and intervention research should be conducted to validate the mechanisms.*

Keywords: employee engagement; work engagement; job resources; leadership; human resource management; systematic review.

1. Introduction

Employee engagement comprises the emotional connection individuals have with their jobs, manifested in vigor, dedication, and absorption (Bakker & Demerouti, 2017). Engagement shows how the structure and support of work influence employees' cognitive, emotional, and behavioral energy (Bailey et al., 2017). Employees encounter different combinations of these in the workplace, such as the task's maximum workload, the degree of freedom in how the task is executed, the quality of leadership, the technological environment, and the opportunities for work-related growth and development. Hence, the same employee may have different engagement profiles in different jobs. It has been reported that even when a great deal of resources are controlled for, job resources retain their engagement prediction role, although their importance may vary (Hakanen et al., 2024). Given the scant evidence, this creates a problem for practice. It may be that the combination of insufficient resources, excessive demands, poorly generalized work relationships, low work meaning, or a combination thereof results in low engagement. A systematic review will help to amass the evidence related to the determinants of engagement, research the trends in the engagement literature, and address the criticisms leveled at the field for assuming that individual motivation can counteract poorly defined working conditions.

The existing literature spans a variety of fields including occupational psychology, human resource management, leadership, public administration, healthcare, education, hospitality, and technology-mediated work. Job Demands-Resources theory posits engagement as a motivational response to the relationship between job demands and job resources, which creates a framework to structure, social, and developmental conditions (Bakker & Demerouti, 2017). From the perspective of social exchange theory, favorable treatment from the organization, as well as fair treatment, support, and trust, can lead to positive relationships, and in turn, lead employees to increase their work investment (Cropanzano et al., 2017). Self-determination theory further clarifies that the motivational state of

being supported by the system to satisfy the needs for autonomy, competence, and relatedness leads to a state of being motivated to work rather than simply complying with the rules (Deci et al., 2017). Conservation of Resources theory states that positive outcomes can create protective spirals, while the repeated loss of control, energy, and/or security leads to an increase in stress and withdrawal (Hobfoll et al., 2018). Previous syntheses integrated varying definitions and types of evidence, including antecedents and outcomes, which warrants the generation of a new determinant matrix based on primary empirical studies (Bailey et al., 2017). Such a synthesis must retain ambiguities and paradoxical findings, and differentiate the number of times a concept has been studied from the amount of evidence supporting the findings.

This review aims to synthesize what is known about the empirically-based determinants of employee engagement within various organizations for the years 2015-2025. It addresses the following questions: what determinants of employee engagement have been studied?; how should these determinants be grouped?; what are the behavioral tendencies (supportive, adverse, mixed, or context-dependent) of these groups?; what are the conceptual, methodological, geographic, and implementation gaps?; finally, what research is needed? This review provides a determinant taxonomy consisting of 13 domains and a evidence map at the study level to provide transparency in research focus. Instead of presuming that the matrix frequency indicates causal importance and, therefore, evidential confidence, this review considers study design, consistency, mechanism, context, and methodological quality. The author seeks to maintain both organizational and employee responsibility and agency in the synthesis by integrating work design and resource conditions with leadership, exchange relationships, personal capacities, job crafting, and new digital conditions. The next section provides a PRISMA-informed process, followed by the development of the determinant framework and matrix, interpretation of the evidence in light of guiding theories, and the specification of evidence-based research priorities. The last section provides a summary of the main findings, and a synthesis of the implications and limitations of the study.

2. Methodology

This is a Systematic Literature Review that uses narrative synthesis and reports findings in a PRISMA-informed way, having conducted primary research or a meta-analysis. The review did not reproduce every proprietary database-specific search line, so a formal PRISMA 2020 checklist was not completed (Page et al., 2021). Prospective registration for the review was not conducted. The eligibility period was set from January 1, 2015 to December 31, 2025, a period of 11 years, to capture the most recent publications on workplace design, leadership, and human resource management, and to avoid the projected publication gaps for 2026. The searches were conducted on September 14, 2026, on the Directory of Open Access Journals, OpenAlex, and the search interfaces of the publishers Frontiers, ScienceDirect, and SpringerLink. Crossref and DOI landing pages were used for metadata verification only. A representative search combined the terms “employee engagement” or “work engagement” with determinant* or antecedent* or predictor* or resource* or demand* or leadership or support or autonomy or “meaningful work” or “job crafting” or justice or “human resource*”, and retained title and abstract, keywords, date, language, and article type, as could be controlled on the respective interfaces. Backward and forward citation tracing was conducted to supplement the search where it was available. Only direct English language peer-reviewed publications were included, and only primary full-text studies on employee or work engagement determinants were eligible. This was conducted despite the coverage limitations of proprietary databases. Given the variability of the determinants, populations, sectors, measures, and relationships modeled, narrative synthesis was the only approach to integrating the evidence that was defensible.

Eligibility included in-window English empirical articles, identifiable employee populations or organizational settings, quantifiable levels of engagement, at least one substantive analysis of a determinant, sufficient methodological information for extraction, and verifiable bibliometric data; reviews, editorials, conceptual papers, duplicate reports, incidental mentions of engagement, samples that were not employees, unavailable data, and out-of-window articles were excluded. Screening, extraction, and coding were done in a structured, single-reviewer format using a spreadsheet;

independent duplicate screening and inter-rater reliability were not performed. Extraction included bibliometric data, setting, design, terminology of determinants, engagement was operationalized as such, direction of the association, mechanisms, and contextual qualifiers; and acknowledged limitations of the authors. Mixed study designs were appraised using the principles of the Mixed Methods Appraisal Tool, and the appraisal informed the interpretive weight of the studies, rather than excluding them (Hong et al., 2018). Original terms of the determinants were compared and consolidated only if they were conceptually equivalent, resulting in thirteen higher-order domains. To assess direction, consistency, mechanism, and levels of confidence, and keeping the frequency of consideration relative to the evidence, a narrative thematic synthesis was performed. The searches that were performed resulted in 223 records. There were 148 records from the DOAJ, 37 from OpenAlex, 30 from Frontiers, four from ScienceDirect, and four from SpringerLink. After 61 duplicates, 162 records were screened. Title/abstract screening excluded 63 records, leaving 99 reports to be requested; three of the reports were not available, and the remaining 96 were accessed and analyzed in full. Thirty non-empirical full texts were excluded (determinant relevance, insufficient extractable data, linguistic and publication type mismatch, insufficient analysis of engagement, out-of-window samples), leaving 66 studies for the narrative thematic synthesis. Figure 1 outlines the main steps in the process; limitations included English-only coverage, exclusion of grey literature, public-interface searching, single-reviewer decisions, and publication bias.

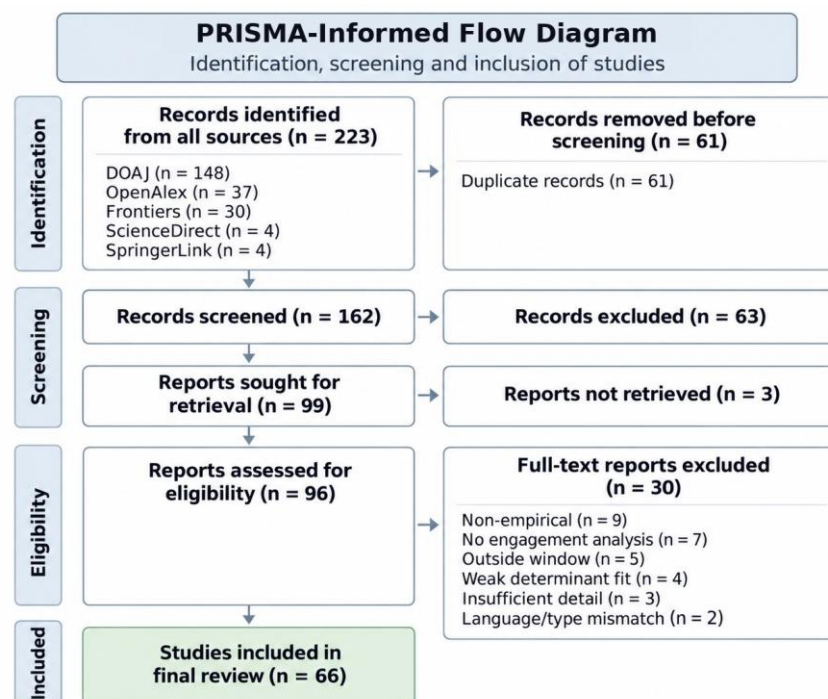


Figure 1: The Systematic Review Process

3. Conceptual and Analytical Innovation

The synthesis defines employee engagement as an active motivational state caused by the intersection of what the job requires, what the work system provides, how employees interpret exchange relationships, and the resources they can utilize. Thirteen determinant domains have been generated indirectly: Job Resources, Job Demands, Leadership, Organizational Support, Autonomy, Meaningful Work, Job Crafting, Personal Resources, Justice/Trust, HR Practices, Social Support, Work Climate, and Digital Conditions. Though the domains are related, they are distinct from one another. Job Resources and Job Demands make up the core of the architectural design of a job. Leadership, Organizational Support, Justice/Trust, Social Support, HR Practices, and Work Climate place engagement within relational and institutional exchange. Autonomous Meaningful Work motivation is captured by Task experience, while Adaptive Agency in interpreting and reshaping work is represented by Job Crafting and Personal Resources, respectively, within the framework of

this model. Digital Conditions represent the modern work economy as a resource and a demand. This framework extends the Job Demands-Resources model by explicitly differentiating the resource provision and integrates social exchange and self-determination (Bakker & Demerouti, 2017). Table 1 indicates the 66 studies it represents, and demonstrates how the domains have been substantively measured or analyzed, not just mentioned. As such, the table intends to provide a research coverage map rather than a influence or effect size ranking.

Table 1: Literature Review Matrix

No.	Author(s) and Year	Job Resources	Job Demands	Leadership	Organizational Support	Autonomy	Meaningful Work	Job Crafting	Personal Resources	Justice/Trust	HR Practices	Social Support	Work Climate	Digital Conditions	Employee Engagement	Sector	Theory / Framework Used	Country / Study Location
1	Radstaak & Hennes (2017)	✓		✓				✓							✓	Mail and parcel logistics	Leader-Member Exchange (LMX) framework	Netherlands
2	Rantika & Yustina (2017)			✓					✓						✓	Public accounting	No explicit named theory/framework	Indonesia
3	van Wingerden & Poell (2017)	✓						✓							✓	Multi-sector workforce	Job Demands-Resources (JD-R) theory	Netherlands
4	Malinowska et al. (2018)					✓			✓						✓	Outsourcing services	Self-Determination Theory + JD-R	Poland
5	Oosthuizen et al. (2018)									✓					✓	Retail and manufacturing	Social Exchange Theory	South Africa
6	Langseth-Eide (2019)	✓	✓												✓	Higher education	JD-R theory	Norway
7	Vermooten et al. (2019)						✓	✓	✓						✓	Financial services	JD-R theory	South Africa
8	Hulshof et al. (2020)	✓						✓							✓	Public employment services	JD-R + Experiential Learning Theory	Netherlands
9	Kulikowski & Sedlak (2020)	✓	✓									✓			✓	Multi-occupational workforce	JD-R model	Poland
10	Lai et al. (2020)			✓											✓	Healthcare (hospitals)	No explicit named theory/framework	Taiwan
11	Meng et al. (2020)	✓		✓		✓	✓								✓	Police / public safety	Job Characteristics / meaningfulness framework	China
12	Sakuraya et al. (2020)							✓							✓	Multi-workplace sample	Job crafting / JD-R framework	Japan
13	Thomas et al. (2020)							✓							✓	Construction	JD-R framework	South Africa
14	Alfatekha W & Budiono. (2021)				✓			✓							✓	Private company (industry not stated)	No explicit named theory/framework	Indonesia
15	Asmaluddin & Sintaasih (2021)			✓			✓		✓						✓	Aviation / air navigation	No explicit named theory/framework	Indonesia
16	Fadhilaini et al. (2021)								✓	✓					✓	Education (teachers)	No explicit named theory/framework	Indonesia
17	Khusanova et al. (2021)	✓					✓								✓	Public organizations (multi-sector)	Kahn's Psychological Conditions Theory	Uzbekistan
18	Parabakaran & Abdul Lasi (2021)	✓									✓	✓			✓	Laboratory services	No explicit named theory/framework	Malaysia
19	Saad et al. (2021)	✓									✓				✓	Banking	No explicit named theory/framework	Egypt
20	Wibawa & Takahashi (2021)			✓					✓						✓	Higher education / working graduate students	No explicit named theory/framework	Indonesia
21	Aulia et al. (2022)				✓				✓						✓	Emergency / high-risk public service	No explicit named theory/framework	Indonesia
22	Chen et al. (2022)						✓		✓						✓	Multi-organizational workforce	Grounded Theory of Work Engagement	China
23	Cheng et al. (2022)		✓										✓		✓	Multi-organizational workforce	Cognitive-Affective Systems Theory + JD-R	China
24	Chikobvu & Harunavamwe (2022)								✓						✓	Healthcare (public hospitals)	No explicit named theory/framework	South Africa
25	dos Santos et al. (2022)	✓			✓										✓	General workforce	JD-R model	Portugal
26	Harun et al. (2022)		✓												✓	Healthcare (public hospitals)	No explicit named theory/framework	Malaysia
27	Indoyo & Ranihusna (2022)									✓			✓		✓	Public health centers	No explicit named theory/framework	Indonesia
28	Khattak et al. (2022)	✓		✓											✓	Hospitality (hotels)	No explicit named theory/framework	China

No.	Author(s) and Year	Job Resources	Job Demands	Leadership	Organizational Support	Autonomy	Meaningful Work	Job Crafting	Personal Resources	Justice/Trust	HR Practices	Social Support	Work Climate	Digital Conditions	Employee Engagement	Sector	Theory / Framework Used	Country / Study Location
29	Ntseke et al. (2022)			✓											✓	Engineering	No explicit named theory/framework	South Africa
30	Ooi et al. (2022)										✓				✓	Private higher education	Conceptual framework	Malaysia
31	Uppathampracha & Liu (2022)			✓					✓						✓	Banking	No explicit named theory/framework	Thailand
32	Zhou et al. (2022)			✓					✓						✓	Higher education	Social Exchange Theory	Pakistan
33	Aman-Ullah et al. (2023)								✓		✓				✓	Hospitality	No explicit named theory/framework	Pakistan
34	Bhattarai & Budhathoki (2023)								✓						✓	Humanitarian nonprofit	Person-Environment Fit framework	Nepal
35	Chanafi & Yudianto (2023)						✓	✓							✓	Private companies	No explicit named theory/framework	Indonesia
36	Goyal et al. (2023)										✓				✓	IT / software	Social Exchange Theory	India
37	Gwamanda & Mahembe (2023)			✓									✓		✓	Private security	Conceptual/theoretical model	South Africa
38	Lee & Jo (2023)	✓	✓						✓						✓	Private enterprises	JD-R model	South Korea
39	Mdhlosse (2023)										✓			✓	✓	Not sector-specific (secondary-source study)	No explicit named theory/framework	Not applicable (secondary-source study)
40	Rabiul et al. (2023)						✓		✓		✓		✓		✓	Hospitality (five-star hotels)	Self-Concept Theory	Malaysia
41	Riyono & Sujadiyanto (2023)				✓				✓						✓	Private companies / remote work	No explicit named theory/framework	Indonesia
42	Rubianto & Kembaren (2023)								✓					✓	✓	Remote / telecommuting workforce	No explicit named theory/framework	Indonesia
43	Simbula et al. (2023)				✓							✓			✓	General workforce	Social Exchange Theory + Social Identity Theory	Italy
44	Tashima-Cid et al. (2023)							✓	✓						✓	General workforce	No explicit named theory/framework	Brazil
45	Widowati & Satrya (2023)			✓					✓						✓	Banking	JD-R theory	Indonesia
46	Alam et al. (2024)										✓	✓			✓	Manufacturing / apparel	Social Exchange Theory	Bangladesh
47	Alonderienė & Urbelė (2024)										✓		✓		✓	IT / technology	Social Identity Theory	Lithuania
48	Cai et al. (2024)			✓	✓				✓						✓	Project-based organizations	Conservation of Resources (COR) Theory	Not stated
49	Cao & Dong (2024)			✓						✓					✓	Cross-sector workforce	JD-R model	Vietnam
50	Chen et al. (2024)		✓						✓				✓		✓	Cross-sector (finance, insurance, manufacturing, internet)	Career Construction Theory + JD-R	China
51	DeHaan et al. (2024)	✓	✓		✓	✓			✓						✓	General U.S. workforce	JD-R + Self-Determination Theory	United States
52	Díaz-Fúnez et al. (2024)								✓				✓		✓	Public administration	JD-R model	Spain
53	Hakanen et al. (2024)	✓				✓						✓			✓	Multi-sector organizations	JD-R theory	Finland
54	Navas-Jiménez et al. (2024)			✓					✓						✓	Military	JD-R model	Spain
55	Pedersoli et al. (2024)			✓				✓	✓						✓	Public and private organizations	JD-R model	Brazil
56	Sharma et al. (2024)										✓		✓		✓	IT / technology	Resource-Based Theory + Signaling Theory	India
57	Sun et al. (2024)				✓				✓						✓	General workforce	Conservation of Resources (COR) Theory	China
58	Wonda et al. (2024)				✓					✓					✓	Municipal government	Psychological Contract / Social Exchange framework	Ethiopia
59	Akanmu et al. (2025)	✓									✓				✓	Higher education	Social Exchange Theory	Malaysia
60	Alrifae (2025)										✓				✓	Education	No explicit named theory/framework	Jordan
61	Ansa & Shaharruddin (2025)	✓	✓			✓			✓						✓	Public secondary education	JD-R model	Pakistan
62	Embalsado et al. (2025)					✓						✓			✓	Education	JD-R model	Philippines
63	Li et al. (2025)			✓						✓					✓	ICT	Social Exchange Theory	China
64	Muhammad (2025)				✓						✓	✓			✓	Corporate workforce	No explicit named theory/framework	Not stated

No.	Author(s) and Year	Job Resources	Job Demands	Leadership	Organizational Support	Autonomy	Meaningful Work	Job Crafting	Personal Resources	Justice/Trust	HR Practices	Social Support	Work Climate	Digital Conditions	Employee Engagement	Sector	Theory / Framework Used	Country / Study Location
65	Olivo et al. (2025)	✓				✓								✓	✓	Public administration	JD-R / resource framework	Italy
66	Zhang & Deng (2025)		✓	✓								✓		✓	✓	Technology firms	Conservation of Resources Theory + JD-R	China
Total Studies per Factor		17	9	18	10	7	7	10	26	7	14	8	7	5	66			

The matrix shows an evidence base that is dispersed rather than dominated by a single factor. Personal Resources was reported in 26 studies (39.4%), with Leadership in 18 (27.3%), Job Resources in 17 (25.8%), and HR Practices in 14 (21.2%). Organizational Support and Job Crafting were each reported in 10 studies (15.2%), with Job Demands in nine (13.6%), and Social Support in eight (12.1%). No domain was reported in 60% or more of the studies included. This indicates that research attention is spread across different explanatory traditions rather than converging on a single canonical antecedent. The pattern does suggest meaningful clustering. Resource-oriented studies clustered supportive design of jobs with engagement. Leadership studies clustered Relational and Motivational signals. HR studies clustered institutional resources with a range of practices including training, communication, and networking. It is strengthened by longitudinal research that different job resources have an unequal capacity to be predictors, and therefore a single, generic resource score should not be considered (Hakanen et al., 2024). Similarly, the matrix shows that when the scope of the study includes both demands and resources, the explanatory power of financial rewards decreases, and therefore a high frequency of occurrence does not necessarily equate to high practical influence (Kulikowski & Sedlak, 2020). Thus, the matrix supports a relative, rather than an absolute, interpretation of the studies.

Digital Conditions was the least studied domain in the five studies at 7.6%. Autonomy, Meaningful Work, Justice/Trust, and Work Climate, and Social Support were each studied in seven (10.6%), eight (12.1%), and five (7.6%) studies, respectively. Personal Resources was the only domain examined in more than 30% of the included studies. The remaining domains were examined in less than 30% of the studies, and no domain was examined in more than 60% of the studies. Just because a domain was examined infrequently, doesn't mean it is less important. Autonomy is a core element of self-determination and is important in studies of task design and remote work, including longitudinal studies that examine how workers may be engaged differently in various digital and other resource-constrained work arrangements (Olivo et al., 2025). Meaningful Work serves more often as a bridge between task characteristics or HR dimensions and work engagement than it does as a singular work engagement predictor (Khusanova et al., 2021). Compared to the other domains, the rate of development in remote work and digital exhaustion, and using technology as a resource, has outpaced most other longitudinal research. The more advanced literature covers integrated various determinants at different levels, while the majority of the literature covers a few determinants at best, and draws strong conclusions about narrow mechanisms, but weak conclusions about system-level integration. This unbalance is the basis for the confidence judgments in the Discussion: domains that have been infrequently examined and/or only been examined in a cross-sectional manner.

Table 2: Sector, Theoretical Framework, and Geographic Distribution of Included Studies

Dimension	Category	Studies (n)	Percentage (%)
Sector	Cross-sector / General workforce	20	30.3
	Education / Higher education	9	13.6
	IT / Technology	5	7.6
	Financial services / Banking	4	6.1
	Healthcare	4	6.1
	Professional / Business / Other services	4	6.1

Dimension	Category	Studies (n)	Percentage (%)
	Public administration / Government	4	6.1
	Public safety / Defense / Security	4	6.1
	Hospitality	3	4.5
	Construction / Engineering	2	3.0
	Manufacturing / Retail	2	3.0
	Transportation / Logistics / Aviation	2	3.0
	Humanitarian nonprofit	1	1.5
	Not sector-specific	1	1.5
	Project-based organizations	1	1.5
Theory / Framework	No explicit named theory/framework	23	34.8
	Job Demands-Resources (JD-R) framework	16	24.2
	Multiple frameworks	11	16.7
	Social Exchange Theory	6	9.1
	Conservation of Resources (COR) Theory	2	3.0
	Study-specific conceptual framework	2	3.0
	Grounded Theory of Work Engagement	1	1.5
	Kahn's Psychological Conditions Theory	1	1.5
	Leader-Member Exchange (LMX) framework	1	1.5
	Person-Environment Fit framework	1	1.5
Geography	Self-Concept Theory	1	1.5
	Social Identity Theory	1	1.5
	Indonesia	11	16.7
	China	8	12.1
	South Africa	6	9.1
	Malaysia	5	7.6
	Netherlands	3	4.5
	Pakistan	3	4.5
	Brazil	2	3.0
	India	2	3.0
	Italy	2	3.0
	Not stated	2	3.0
	Poland	2	3.0
	Spain	2	3.0
	Bangladesh	1	1.5
	Egypt	1	1.5
	Ethiopia	1	1.5
	Finland	1	1.5
	Japan	1	1.5
	Jordan	1	1.5
	Lithuania	1	1.5
	Nepal	1	1.5
	Norway	1	1.5
	Not applicable (secondary-source study)	1	1.5
	Philippines	1	1.5
	Portugal	1	1.5
	South Korea	1	1.5
	Taiwan	1	1.5
	Thailand	1	1.5
	United States	1	1.5
	Uzbekistan	1	1.5
	Vietnam	1	1.5

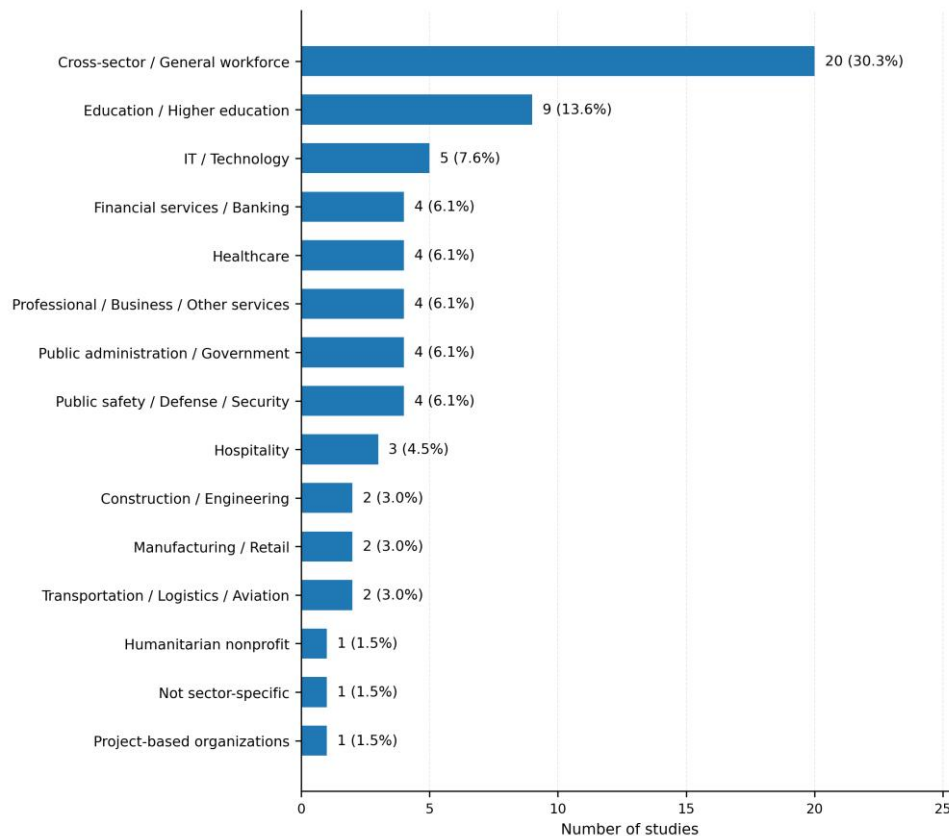


Figure 2: Sector distribution of the 66 studies included in the systematic literature review

To make the contextual coverage of the 66 included studies explicit, Table 1 shows the sector, theory/framework, and country or study location code for each study. Table 2 shows the distributions and summarizes the results, and sector coverage is shown in Figure 2. The largest sector grouping is the cross-sector or general workforce studies (20/66, 30.3%), followed by studies in education or higher education (9/66, 13.6%), and studies in IT/technology (5/66, 7.6%). The theoretical map is also uneven: 23 studies (34.8%) did not name an explicit theory/framework, 16 studies (24.2%) were summarized in the Job Demands-Resources family, and 11 studies (16.7%) combined two or more frameworks. The studies are spread across 28 different countries, but Indonesian (11), Chinese (8), South African (6), and Malaysian (5) studies together account for 30 studies (45.5%). This contextual concentration complements the determinant-frequency pattern: Personal Resources (26 studies), Leadership (18), and Job Resources (17) were the most studied, while Digital Conditions were studied only (5) times. Thus, the combined evidence map shows what determinants were studied, and where and how they were studied, which establishes the need for further sectoral, geographical, and theoretical replications, and treats the lack of studies as a gapping need, rather than as evidence of prioritization.

4. Discussion

The 66 studies best describe employee engagement as a multilevel response to resources, demands, relationships, meanings, and personal capacities, as opposed to an individual trait. The evidence is from 28 countries, and covers various sectors, but the majority of the studies rely on cross-sectional survey design. The other types of designs represented in the corpus are longitudinal or multiwave studies, quasi-experiments, a randomized trial, multilevel designs, and time-lagged data collection. Since many studies combine design features, the types of designs are not mutually exclusive. Personal Resources was the focus of the majority of the studies, but the 39.4% coverage does not indicate it is the most important cause, as a lot of the studies used a self-report design, and reciprocal relationships are possible. The design of resources at work shows a relatively stable pattern: if the work is supported by the right task and organizational resources, engagement is high, and if the work is supported by

too many, or unreasonable, demands, engagement is low, and can be explained by the concepts of strain, insecurity, and alienation (Cheng et al., 2022). Therefore, the Job Demands-Resources model is supported by the studies, and an additive logic is plausible, as resources can be context-dependent and can vary in importance and interact with other resources. Social exchange mechanisms are visible when engagement is preceded by support and justice, and trust, and self-determination mechanisms explain the value of autonomy and meaning. It can be concluded with confidence that broad resource mechanisms are not limited to a single occupation, because of the recurrence in different sectors, although the context will influence how the mechanisms can be employed. While the evidence for interventions is promising, it is still scant. Therefore, the most valid conclusions can be drawn about associations and potential mechanisms as opposed to the universal effects of treatments. Overall confidence is more moderate than high, due to design homogeneity in the face of geographical diversity caused by inconsistent measurements and concentration in a few samples from Asia and Africa.

The most important substantive cluster consists of design elements and motivational resources. Resources, Job Demands, Autonomy, Meaningful Work, and Job Crafting have been researched 17, 9, 7, 7, and 10 times, respectively. The most notable finding is that engagement is greatest when employees have the necessary resources, discretion, and opportunity to craft their work, and when the work has significance, and is least when the work is excessive, there is insecurity or resource depletion. Engagement and recovery are dampened by the other forces at work. Positive changes in the targeted psychological processes have been documented after structured job crafting training in a single randomized control trial, but the impacts on engagement have been small and not sustained across the various studies (Sakuraya et al., 2020). Engagement was found to be maintained during organizational change in a number of quasi-experimental studies as a result of crafting interventions, demonstrating that in a permissive environment, agency is of primary importance (Hulshof et al., 2020). Meaningfulness achieves partially Autonomy and Significance of the task. Leadership can modify these pathways, as opposed to creating a completely new pathway (Meng et al., 2020). Earning a financial reward does not increase engagement, and bonuses have a negligible effect, especially when job resource demands and job resources are considered (Kulikowski & Sedlak, 2020). This cluster supports self-determination and JD-R theories, but also cautions against shifting the burden for engagement solely to employees. Job crafting will not provide the solution in the absence of adequate resources or the removal of legitimate demands. Discretion and opportunities to craft work should be offered before resilience or crafting programs are provided. It is better to have faith in the resource; we can assume that the demand will be met. Constructs of demand and participation measures are specific to professions, and the majority of the estimates are cross-sectional.

Relational and institutional determinants have similarly consistent, situation-specific effects. Leadership was analyzed in 18 studies, Organizational Support in 10, Justice/Trust in 7, HR Practices in 14, Social Support in 8, and Work Climate in 7. Positive relations have been found between employee empowerment, trust, resilience, identification, and fulness at work, and the ethical, servant, transformational, authentic, and secure-base leadership styles. It is more accurate to say that these leadership styles moderate engagement rather than directly causing it (Zhou et al., 2022). Once again, Organizational Support functions as a resource that strengthens reciprocal investment and can build personal resources, therefore, social exchange theory is applicable, without implying that perceived support becomes sufficient when structural demands are high (Cai et al., 2024). The justice and trust literature suggest that employees make the decision as to whether they should reciprocate based on their evaluation of the organizational actions that are created and sustained by HR practices. Employees consider HR practices to be sufficient only when they experience appraisal, training, and supervision in a helpful and non-bureaucratic manner. Engagement is more likely when HR practices are experienced as coherent signals of investment and opportunity. It is expected that the same leadership styles in different samples would lead to different effect sizes due to the difference in public sector institutions, hospitals, universities, hospitality sector organizations, and private businesses. Relational resources may absorb some ambiguity, but it is not true that supportive supervision can absorb the effects of chronic understaffing, excessive workloads, and insecure employment. Practical interventions should bring leadership behavior to match fair systems, credible

support, psychologically safe climates, and coherent HR delivery. Moderate confidence is placed in this observation due to positive associations being found across countries, but uncertainty is caused by common-method measurement and single-source surveys as to the true sequence of events.

The framework identifies the most obvious constraints of the existing evidence, while incorporating personal and emerging technologies. Personal Resources was mentioned in 26 studies and includes self-efficacy, resilience, psychological capital, emotional intelligence, mindfulness, adaptability, calling, and person-environment fit. These resources have been linked to engagement and may function as mediating or amplifying mechanisms that contribute to the improvement of organizational outcomes. Mindfulness training has been shown to strengthen meaning-based engagement, as well as emotional regulation and work-based competence, going beyond correlational research (Chen et al., 2022). However, in the Conservation of Resources theory, personal resources should be viewed as gain-enabling capacities that reside within a larger resource system, and not as evidence of employees' self-regulatory skills under depleting conditions (Hobfoll et al., 2018). Of the five studies focused on digital conditions, the results imply that, in conjunction with digital exhaustion, the remote work technologies create a situation where, even if more resources are made available to the employee and if employee digital work autonomy is increased, the situation remains one of high resource demand and low employee control. Three-wave data collected on remote workers also shows a reciprocal relationship between technological resources and engagement, justifying the need to include digital frameworks and contexts in the research (Olivo et al., 2025). The existing digital evidence also suggests that the high speed of technological advances can exceed the validity of engagement measures in conditions of monitoring, algorithmic management, interruptions, and hybrid coordination. The same can be said for personal resources; their benefits can rapidly dissipate if they are not challenged. There is the most support for broad resources and supportive-relational mechanisms, with moderate support for personal resources, and less support for digital, climate, and other mechanics arbitrarily sampled. Limited by publication bias, self-report predominance, measurement inconsistency, and geographic clustering, it is difficult to establish causality. Thus, what is most needed is longitudinal, multilevel, comparative, and intervention research.

5. Research Gaps and Future Research Directions

The main conceptual gap is the fragmentation in how different determinants are defined and positioned with regards to the engagement phenomenon. thirteen domains were needed to harmonize the terminology, and while some studies use broad labels like job resources or personal resources, others define autonomous, psychological capital, or Trust and support. This creates construct overlap and prevents comparison of supposedly similar findings. Theories are also inconsistently employed. The Job Demands-Resources model is by far the most employed, while self-determination, social exchange, Conservation of Resources, and other more specific identity or cognitive-affective models are employed infrequently and in an isolating fashion. Self-reported engagement scales, used in combination with self-reported antecedents, continue to predominate measurement, thus creating a common-method bias and leaving behavioral or other objective resources equally as rare. Some of the more recently added domains require more careful consideration. For example, only five studies contained Digital Conditions, while the other seven studies contained Autonomous Meaningful Work, Justice/Trust, and Work Climate. In order to reduce the number of isolated predictors used in research, future studies should focus on measurement invariance, employment sector, and culture, as well as employ combinations of employee reports with administrative or behavioral data and compare different theoretical mechanisms.

The most notable methodological gap is temporal and causal. The majority of the 66 studies utilize cross-sectional designs. There is not enough longitudinal or multi-wave, quasi-experimental, randomized, or time-lagged evidence to make strong claims about direction and reciprocity, let alone duration. There is some overlap in the designs studied, and therefore, counts are not presented as mutually exclusive. The evidence is geographically wide, spanning 28 countries, but is concentrated in Indonesia, China, South Africa, and Malaysia, with many countries and lower-frequency occupations being represented by a lone study. Determinant changes can be tested as preceding

changes in engagement in prospective cohort studies. Work redesign, leadership development, and support systems, as well as digital-work policies, can be tested against comparison conditions in cluster-randomized natural experiments. Measurement equivalence should be tested across boundaries in cross-country studies, and then coefficients can be compared. Digital and hybrid work makes repeated-measures designs necessary to distinguish technology resources from the other forms of work. Implementation studies should focus on the fidelity, reach, sustainability, and unintended consequences of the interventions, rather than solely the post-intervention changes in engagement. Replication in independent samples, preregistered analyses, search-based publishing in multiple languages, broader coverage of databases, and an emphasis on publication bias would improve the next generation of engagement studies.

6. Conclusion

This review summarizes recent empirical data on employee engagement drivers and integrates existing literature on an coherent determinant framework. One hundred thirty-one studies were published in the time period from January 1, 2015, to December 31, 2025, and comprised the following domains: Job Resources, Job Demands, Leadership, Organizational Support, Autonomy, Meaningful Work, Job Crafting, Personal Resources, Justice/Trust, HR Practices, Social Support, Work Climate, and Digital Conditions. Personal Resources were the most studied domain, followed by Job Resources and Leadership, respectively. However, no domain was studied in 60% or more of the included studies, and frequency should not be misconstrued as causal priority. The most consistent finding in the literature is that engagement is positive when there are usable resources and positive relationships, as well as meaningful and autonomous job crafting, and is negatively influenced by excessive job demands. Engagement is also influenced by job demand-related strain, alienation, insecurity, and recovery. This integrates Job Demands-Resources theory with social exchange, self-determination, and resource conservation in the literature gap. The evidence suggests that before organizations focus on employee motivation and resilience, they should work on design more fulfilling and less demanding jobs through better leadership, fairness, and HR and digital working conditions. It is likely that the majority of the studies will remain cross-sectional, and self-report measures will be the primary source of data. There will also be a continued focus on a few countries and sectors. The most important concepts are prospective multilevel studies, credible work-design and leadership interventions, cross-cultural measurement validation, direct comparisons of overlapping mechanisms, and repeated-measures research on digital and hybrid work. This research is critical to differentiate transient correlations from sustainable determinants and to identify which resource configurations work for whom, under what organizational conditions, and for how long. Engagement should be considered an organizational state rather than an individual virtue. The evidence clearly shows that what is valued in an individual's capacity is determined by the work design, leadership, and support, as well as the context. Therefore, the current evidence supports a resource-based, relational, and contextual view of employee engagement. However, more evidence of strong causation and implementation is needed before strong, broad stance work Engagement can be recommended.

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