

**REMOTE ENGAGEMENT: UNVEILING THE RELATIONSHIP BETWEEN  
TELEWORK AND WORK ENGAGEMENT**

**MATHEUS HENRIQUE BASTOS LEITE**  
UNIVERSIDADE DE BRASÍLIA (UNB)

**TATIANE PASCHOAL**  
UNIVERSIDADE DE BRASÍLIA (UNB)

**ALAN MICAEL NOBRE FROTA**  
UNIVERSIDADE DE BRASÍLIA (UNB)

## **REMOTE ENGAGEMENT: UNVEILING THE RELATIONSHIP BETWEEN TELEWORK AND WORK ENGAGEMENT**

Work engagement, understood as a positive and motivational mental state characterized by vigor, dedication, and absorption (Salanova & Schaufeli, 2009; Schaufeli et al., 2002; ), has been extensively studied in the fields of organizational behavior and human resource management (Bakker & Demerouti, 2007; Bakker, Demerouti & Sanz-Vergel, 2023). A substantial body of research has documented the associations between work engagement and a range of positive organizational outcomes and individual behaviors, such as higher individual productivity (Neuber et al., 2021; Christian, Garza, & Slaughter, 2011; Kossyva et al., 2023; Rich, Lepine, & Crawford, 2010), enhanced well-being (Bakker & Demerouti, 2008; Saks, 2006; Schaufeli & Taris, 2014; Schaufeli, 2017; Zahari & Kaliannan, 2022), lower turnover intentions (Rafiq et al., 2019), proactive behavior (Salanova & Schaufeli, 2009) and reduced absenteeism (Neuber et al., 2021). Work engagement can be a key pathway to enhancing numerous forms of organizational performance (Clack, 2021; Delaney & Royal, 2017; Joo & Lee, 2017).

In recent years, flexible work arrangements, particularly telework, have expanded alongside the growing academic and managerial interest in employee engagement. Driven partly by increasing digitalization and further accelerated by the COVID-19 pandemic, alternative work arrangements have brought about notable changes in work dynamics and employees' relationship with tasks and demands. Telework has had significant implications for aspects such as autonomy, social interaction, and organizational control mechanisms (Allen, Golden, & Shockley, 2015; Palumbo, 2021; Vera et al., 2016; Wang et al., 2021). Contemporary literature offers a robust body of evidence on the effectiveness of telework and its various positive and negative consequences, especially at the individual level, concerning job satisfaction, well-being, performance, work–family interface, social isolation and support, and workload (Allen et al., 2015; Bailey & Kurland, 2002; Gajendran & Harrison, 2007; Golden & Gajendran, 2019; Grant, Wallace, & Spurgeon, 2013; Wang et al., 2021).

Although telework is not a recent organizational practice, with empirical studies on its effects and effectiveness dating back to the 1990s (Konradt, Schmooch, & Malecke, 2000; Walentek, 2020), research findings on its impact on work engagement remain limited. The relationship between telework and engagement has sparked ongoing debate, with studies pointing to positive and negative effects (Boell et al., 2016; Vayre et al., 2022; Nemteanu & Dabija, 2023). On one hand, research has suggested that telework may foster higher engagement, particularly when employees perceive greater control over their work routines and flexibility to balance professional and personal life (Gajendran & Harrison, 2007; Golden, 2006). On the other hand, telework may undermine engagement, primarily when it is associated with social isolation, reduced interaction with colleagues and supervisors, and a weakened sense of belonging (Kirkman et al., 2004).

Recent literature reviews have examined telework and work engagement as separate research domains (Allen et al., 2015; Beckel & Fisher, 2022; Melo et al., 2025; Fletcher, Bailey, & Madden, 2020; Kossyva et al., 2023; Zahari & Kaliannan, 2022). An examination of the publications indexed in the Web of Science (WoS) and Scopus databases revealed a lack of systematic literature reviews that directly integrate both topics and offer a comprehensive overview of the relationship between telework and work engagement. Consequently, the impact of telework on engagement remains a contested issue, with the literature indicating that outcomes may vary depending on various contextual and individual factors. This gap has implications for understanding how digital transformation, remote work infrastructures, and workforce adaptability affect organizational effectiveness and employee well-being. These are core concerns of technological forecasting and the social implications of work innovation.

Amid these ongoing debates, we raised the question: How does telework influence work engagement? To address this question, we systematically mapped the academic literature on the intersection between telework and work engagement to identify key relationships between the two topics and highlight the main variables that shape engagement in telework settings. Specifically, we conducted a systematic literature review (SLR) on empirical studies exploring the relationship between telework and work engagement.

This systematic literature review provides a relevant and timely contribution by consolidating the existing knowledge on the relationship between telework and work engagement. Through a critical analysis of empirical research addressing this intersection, the review identifies the main themes and variables studied, the most prominent antecedents of engagement in telework contexts, and areas that remain underexplored or contentious in the literature. The findings advance theoretical understanding of how telework influences employee engagement and the conditions under which these effects occur, enriching the broader discussion on flexible work arrangements in human resource management and organizational behavior. Additionally, this review outlines promising avenues for future research, including developing new theoretical models that respond to the evolving nature of work in contemporary organizations. Beyond its academic contributions, the findings also have practical implications. By clarifying how telework shapes engagement, this study contributes to anticipating future challenges and designing resilient, human-centered work systems. The review can also inform organizational leaders and policymakers in implementing more effective strategies for managing and developing distributed teams by identifying factors that facilitate or hinder engagement in remote work contexts.

## **CONCEPTUAL FRAMEWORK**

Work engagement is considered one of the most central variables in organizational behavior (Bakker & Demerouti, 2007; Bakker, Demerouti & Sanz-Vergel, 2023; Luthans, 2002; Luthans & Youssef, 2007). In a review of scientific publications on the topic, Schaufeli (2012) reported the existence of over 200 articles published between 1990 and 2012, reflecting a growing interest among researchers and a context consistent with the emergence and development of positive psychology in the early 21st century. Work engagement is a persistent, positive, and fulfilling work-related state of mind, characterized by vigor, dedication, and absorption (Salanova & Schaufeli, 2009; Schaufeli et al., 2002; Schaufeli, Bakker & Salanova, 2006; Schaufeli, Taris & Van Rhenen, 2008). Vigor refers to energy and mental resilience; dedication reflects enthusiasm, pride, and a sense of purpose; absorption captures deep focus and immersion in work.

Given the importance of work engagement for both organizational outcomes and individual behaviors, empirical research on its antecedents has been extensive, allowing for a consistent understanding of the factors that influence this phenomenon and result from it (Rich, Lepine, & Crawford, 2010; Saks, 2006; Zahari & Kaliannan, 2022). The Job Demands–Resources (JD-R) model has underpinned most of this research, providing the theoretical and methodological framework needed to understand the complex relationships between organizational and individual variables and work engagement (Bakker et al., 2023; Bakker & Demerouti, 2007; Bakker, Demerouti & Sanz-Vergel, 2014). This model analyses and classifies work environment and personal aspects as demands or resources, each exerting distinct effects on engagement, either enhancing or hindering it.

Demands refer to aspects of work that require sustained physical or psychological effort from employees and typically include variables such as workload, role ambiguity, and role conflict. Demands are more strongly associated with stressful experiences at work (Bakker et al., 2014; Schaufeli & Taris, 2014; Schaufeli, 2017). Resources, in contrast, are the most significant predictors in explanatory engagement models. These variables facilitate achieving

work goals, mitigate the negative impact of demands, and promote personal growth and development. Examples of job resources include appropriate feedback on individual and team performance, job autonomy, and social support from colleagues and supervisors. Among personal resources, resilience and adaptability enhance workers' ability to manage job demands and foster positive individual experiences (Akkermans et al., 2013; Silva et al., 2019; Soares et al., 2024).

Empirical studies suggest that a combination of organizational and personal resources influences work engagement. For instance, Rich et al. (2010) identified leadership support, feedback, and autonomy as essential antecedents of engagement. Xanthopoulou et al. (2009) reinforced this perspective by demonstrating that personal resources such as self-efficacy and optimism also contribute significantly to this positive state. Complementarily, reviews conducted by Kossyva et al. (2023) and Zahari and Kaliannan (2022) emphasize the role of organizational practices, leadership, and value alignment as predictors of engagement across diverse occupational settings.

Studies have thus shown that employee engagement is strongly influenced by work-related and organizational variables, which are expressed and sustained through organizational and managerial practices. With the evolution of work arrangements and the growing flexibilization of labor structures, significant changes have been observed in organizational design, work environments, leadership practices, and, consequently, in organizational behavior itself (Kowalski & Loretto, 2017; Iannotta, Meret & Marchetti, 2020). Telework alters how people work (Dingel & Neiman, 2020), thereby shaping workers' individual realities and redefining and reshaping classical constructs in organizational behavior (Boell et al., 2016).

Consequently, research on engagement within the context of new work modalities and flexible arrangements, such as telework and hybrid models, has gained increasing relevance. Given the transformations in work configurations, telework has emerged as a significant driver in reconfiguring variables traditionally examined in organizational behavior. In particular, work engagement is influenced by multiple factors, including organizational and personal resources, and its manifestation may be affected by the specific characteristics of remote work.

## **METHOD**

This study employed a Systematic Literature Review (SLR) as a documentary research method, guided by a predefined protocol, predominantly qualitative, based on secondary data, and grounded in findings from a sample of published studies. This approach aims to identify scientific evidence on a specific topic (Tranfield et al., 2003). To ensure transparency and methodological rigor, the review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) protocol, which structures the review process into four interconnected stages: (1) identification, (2) screening, (3) eligibility, and (4) inclusion. The guiding research question in the present study was: How does telework influence work engagement? The procedures adopted in each stage of the review protocol are detailed below.

### **Identification**

Based on the guiding research question, the databases selected for searching were Scopus and Web of Science (WoS). Scopus was chosen due to its extensive indexing of peer-reviewed journals, while WoS was selected for its wide temporal coverage and the high quality of its indexed sources (Chadegani et al., 2013).

Given the specificity of the topic, the following search terms were employed: telework; teleworking; remote work; telecommuting; remote workers; teleworkers; virtual teams; virtual work; and engagement. Boolean operators combined terms, and the search was restricted to the title, abstract, and keyword fields. Truncation (\*) was applied to capture all relevant derivations of the terms. We defined the final search string as:

(telework OR "remote work" OR telecommuting OR "virtual teams" OR "virtual work") AND (engagement)\*\*.

### Screening

Following the initial search, duplicate records, i.e., studies retrieved from both databases, were removed. Subsequently, filters were applied to include only documents categorized as "peer-reviewed journal articles", with no publication year restriction to capture the full breadth of the literature. Subject areas related to the research focus, such as Business, Management, Accounting, and Applied Psychology, were selected, depending on each database's classification system. Only articles published in English were included to ensure the international relevance of the literature.

### Eligibility

All records retained after screening underwent title, abstract, and keyword analysis to assess their relevance to the review question. Articles that did not demonstrate a clear connection to the topic were excluded. Full-text reading was then conducted on the remaining articles to evaluate their eligibility in greater depth. This step resulted in the final corpus of studies included in the review.

### Inclusion and Data Synthesis

The final set of selected articles was subjected to bibliometric and thematic analyses. For this purpose, two open-source software tools were used: RStudio® and VOSviewer®. Bibliometric data were imported and analyzed using the bibliometrix package in RStudio® (Aria & Cuccurullo, 2017) to extract key bibliometric indicators and patterns. VOSviewer® was employed to generate co-occurrence maps and visual representations of thematic clusters, enabling a more precise depiction of relationships and emerging themes within the field.

**Tabela 1.** Systematic Review Protocol by Stage

Stage	Description	Number of Studies	
		WoS	Scopus*
Stage 1	(telework* OR "remote work*" OR telecommuting OR "virtual teams" OR "virtual work") AND (engagement)	32	611
Stage 2	Document type: article Language: english Thematic fields: <i>business, management, accounting and psychology applied</i>	19	141
Stage 3	Thorough analysis and complete reading	11	88
Stage 4	Bibliometric analysis: Bibliometrix (Rstudio) and VOSviewer	11	88*
<b>TOTAL</b>		<b>99</b>	

Source: Elaborated by the authors.

\*Three duplicate studies identified in both databases were excluded from the total.

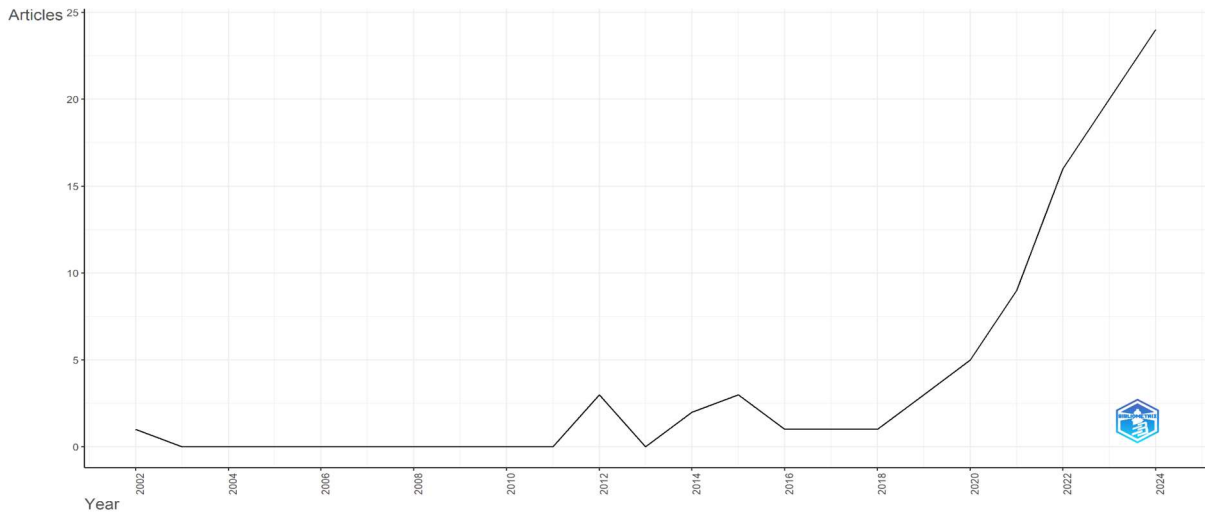
## RESULTS

The results section is organized into two main parts. First, a bibliometric analysis offers a quantitative overview of the research landscape, identifying publication trends, influential authors, and thematic clusters. Second, a thematic content analysis provides a qualitative synthesis of the selected studies' core findings and conceptual insights, addressing the nuances of the relationship between telework and work engagement.

### Bibliometric overview of telework and work engagement research

This systematic review retained 99 articles addressing telework and work engagement, without imposing any temporal restrictions. Although publications date back to the early 2000s, the temporal distribution reveals a higher concentration of studies conducted over the past twelve years, with a marked increase starting from 2018, as illustrated in Figure 1.

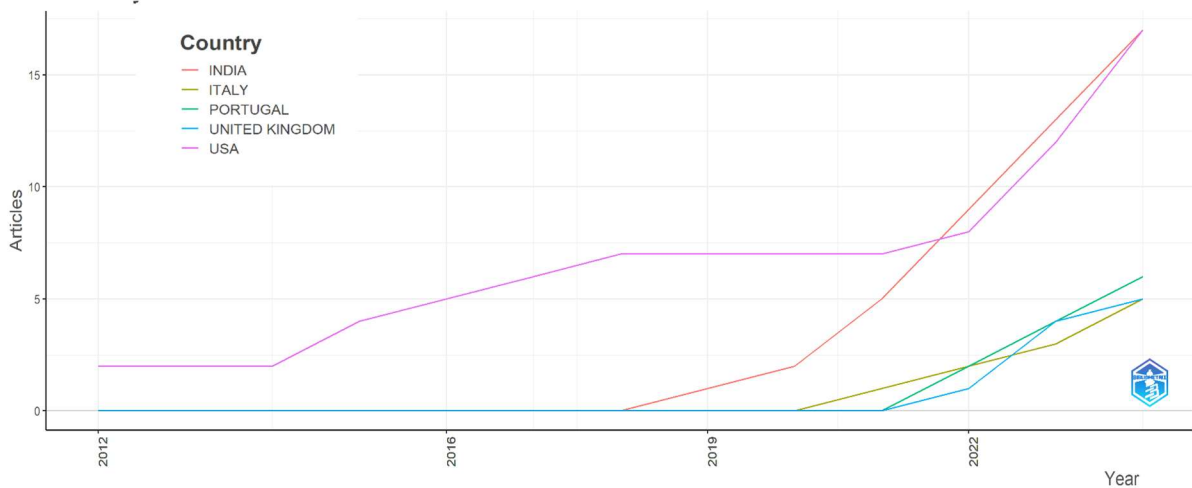
Figura 1. Annual publication trends on telework and work engagement



Source: Elaborated by the author using the Bibliometrix package in RStudio (Aria & Cuccurullo, 2017)

Regarding geographical distribution, most studies were conducted in India, the United States, Portugal, Italy, and the United Kingdom, respectively, as shown in Figure 2. Countries such as Brazil, Australia, China, and France had limited studies on the intersection between telework and engagement (only one publication each), highlighting a potential avenue for future research in these regions. In this regard, cross-cultural studies are highly relevant, as organizations and the business environment are increasingly globalized. Overlooking cultural nuances can lead to significant failures in communication and in managing human diversity, especially in multinational settings. It may undermine the applicability of the knowledge produced to develop effective global leadership (Stahl et al., 2010).

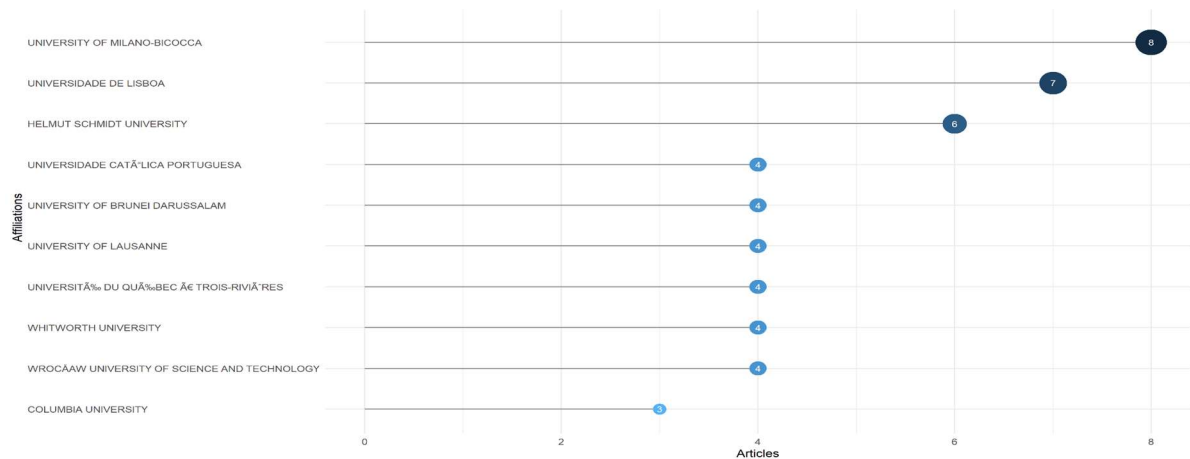
Figura 2. Publications by country over time



Source: Elaborated by the author using the Bibliometrix package in RStudio (Aria & Cuccurullo, 2017)

Concerning the academic institutions that publish most frequently on the topic, the University of Milano-Bicocca (Italy), the University of Lisbon (Portugal), and Helmut Schmidt University (Germany) have consolidated their position as key reference centers in this field, as shown in Figure 3.

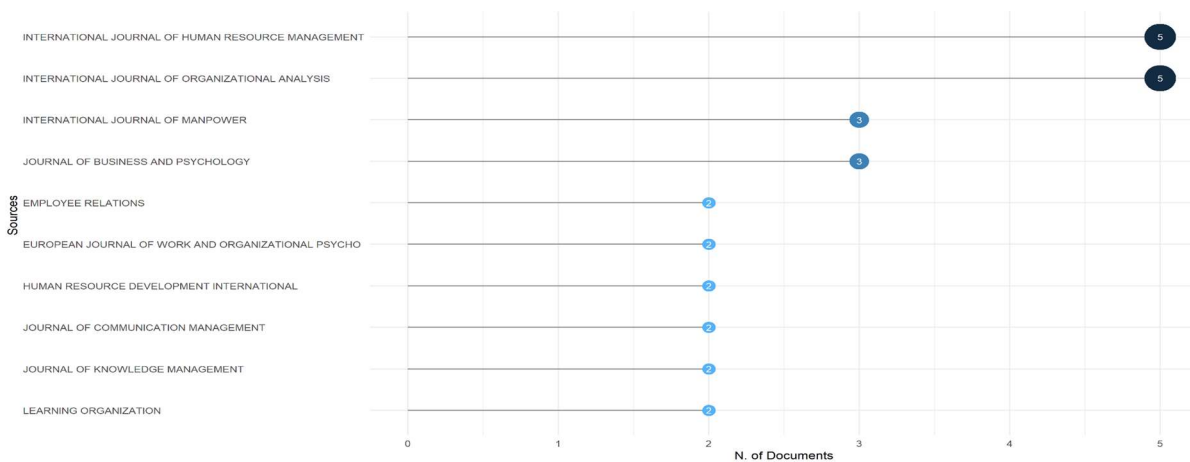
Figure 3. Most relevant academic institutions on the topic



Source: Elaborated by the author using the Bibliometrix package in RStudio (Aria & Cuccurullo, 2017)

The most prolific journals on the topic include the *International Journal of Human Resource Management* and the *International Journal of Organizational Analysis*, which account for 10.1% of all reviewed articles, as shown in Figure 4.

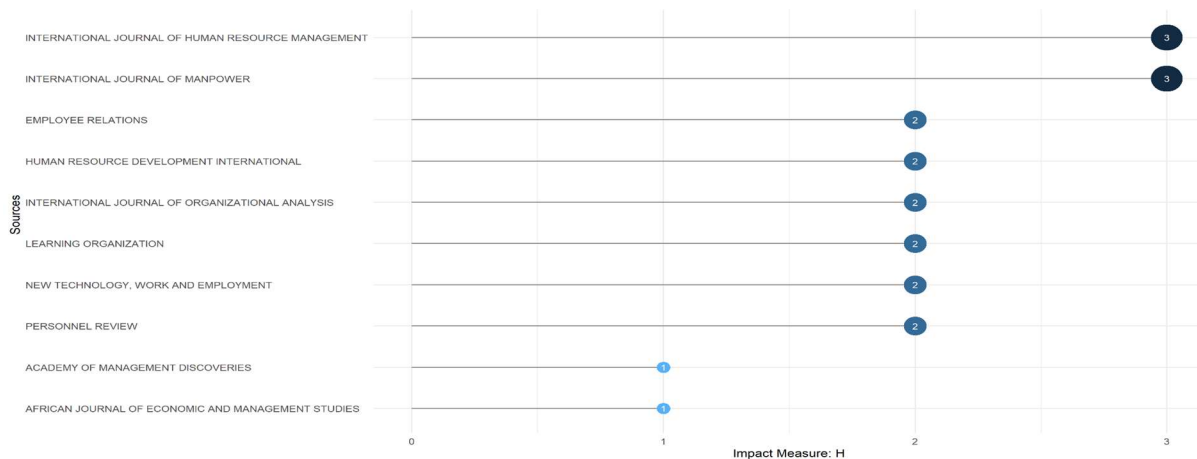
Figure 4. Most prolific journals on the topic



Source: Elaborated by the author using the Bibliometrix package in RStudio (Aria & Cuccurullo, 2017)

Drawing on the data presented in Figure 4, we assessed the most influential journals in the field using the H-index. This metric, calculated via the *Bibliometrix* package based on Hirsch's (2005) classical definition, reflects a source's impact by combining publication volume and citation frequency. Figure 5 displays the highest-impact journals in the sample..

Figura 5. Journal Impact Assessment Based on H-index



Source: Elaborated by the author using the Bibliometrix package in RStudio (Aria & Cuccurullo, 2017)

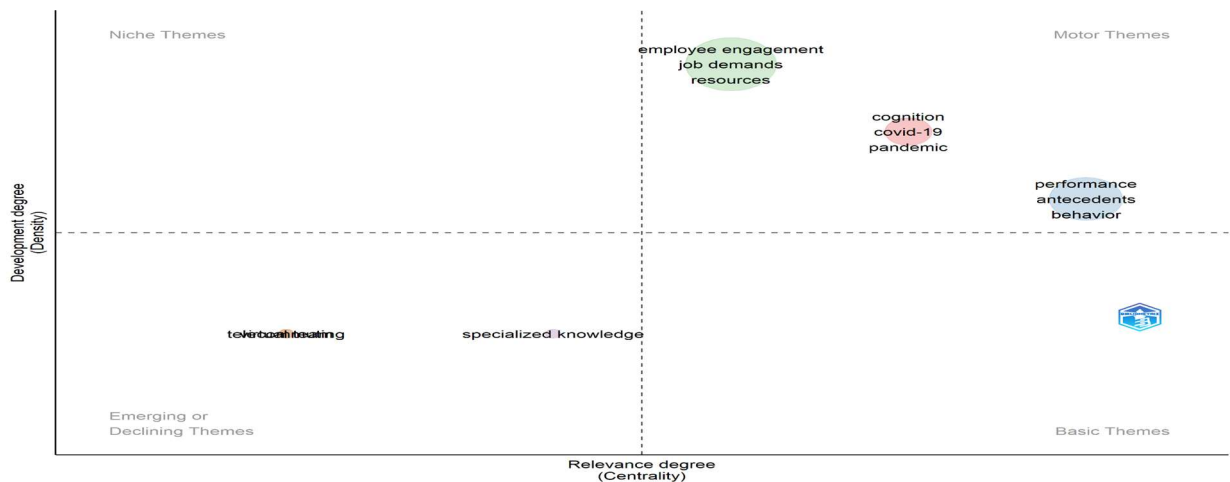
The *International Journal of Human Resource Management* and the *International Journal of Manpower* stand out as the most influential sources, each with an H-index of 3, indicating a higher volume of publications and/or citations. These are followed by journals such as *Employee Relations*, *Human Resource Development International*, and the *International Journal of Organizational Analysis*, each with an H-index of 2, also reflecting relevant impact. The H-index measures the productivity and impact of a source based on the number of published articles and the number of citations received (Kamrani, Dorsch, & Stock, 2021). These findings indicate that scholarly production on the topic is concentrated in a relatively small number of high-impact journals, which may underscore their relevance for researchers seeking to advance knowledge in the field.

Among all studies, five are theoretical. Regarding empirical investigations, most adopted a quantitative approach (81%), while qualitative and mixed-methods approaches were used less frequently (18% and 1%, respectively). This pattern suggests a consolidated methodological tendency toward quantitative designs and points to promising opportunities for future research employing mixed methods to explore and deepen the understanding of how different independent variables influence work engagement.

Regarding the temporal design of the studies, there is a clear predominance of cross-sectional research (approximately 73%) over longitudinal designs (around 37%). Furthermore, approximately 71% of the studies treated work engagement as a dependent variable within their theoretical models, indicating a consistent focus on understanding the factors influencing teleworker engagement.

From a conceptual structure perspective, the thematic map in Figure 6 illustrates the distribution and density of the main topics explored in the literature on this subject.

Figure 6. Thematic Map

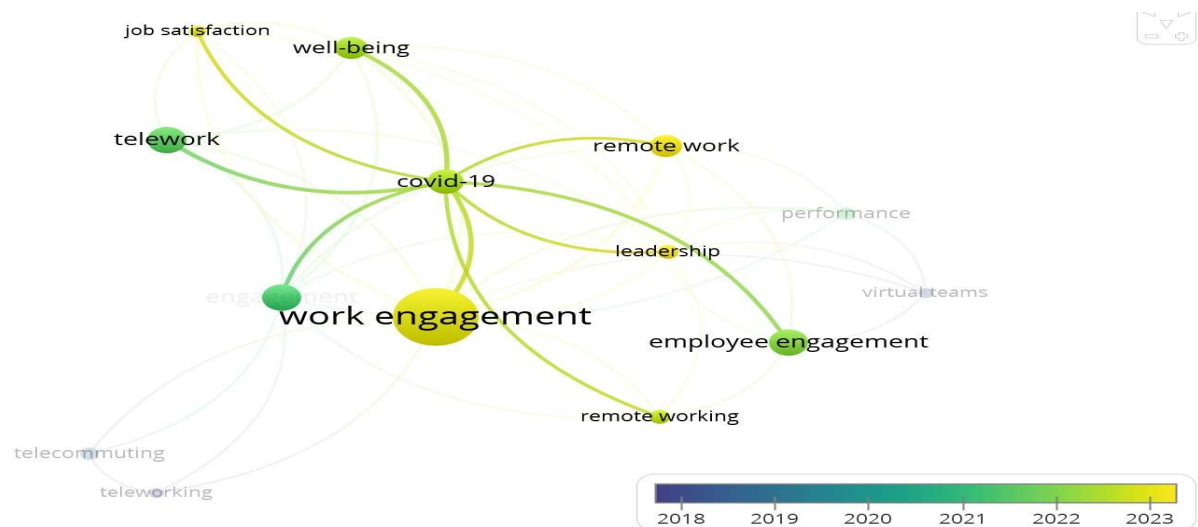


Source: Elaborated by the author using the Bibliometrix package in RStudio (Aria & Cuccurullo, 2017)

The themes located in the upper-right quadrant, such as *employee engagement*, *job demands*, and *resources*, exhibit high density and centrality, indicating the predominance of the Job Demands-Resources (JD-R) model as the primary theoretical framework adopted in the studies (Bakker & Demerouti, 2007). Topics such as *cognition*, *COVID-19*, and *pandemic* appear as emerging areas, reflecting recent trends in the literature and developments in the world of work. Themes situated in the lower-left quadrant, such as *virtual learning* and *specialized knowledge*, present low density and centrality, suggesting they may be declining or still in early stages of development. In contrast, terms such as *performance*, *antecedents*, and *behavior* occupy a strategic position as basic themes, forming the field's conceptual foundation.

In this regard, the analyses generated using VOSviewer® (Figures 7 and 8) highlight the centrality of *work engagement* in recent telework research, particularly concerning the COVID-19 pandemic. The analysis reveals that the pandemic catalyzed the growth of telework-related studies, strongly connecting with well-being, job satisfaction, and leadership. Terms like *remote work* and *employee engagement* also appear prominently, underscoring the importance of understanding how remote environments influence engagement and work dynamics.

Figure 7. Co-occurrence Map: COVID-19

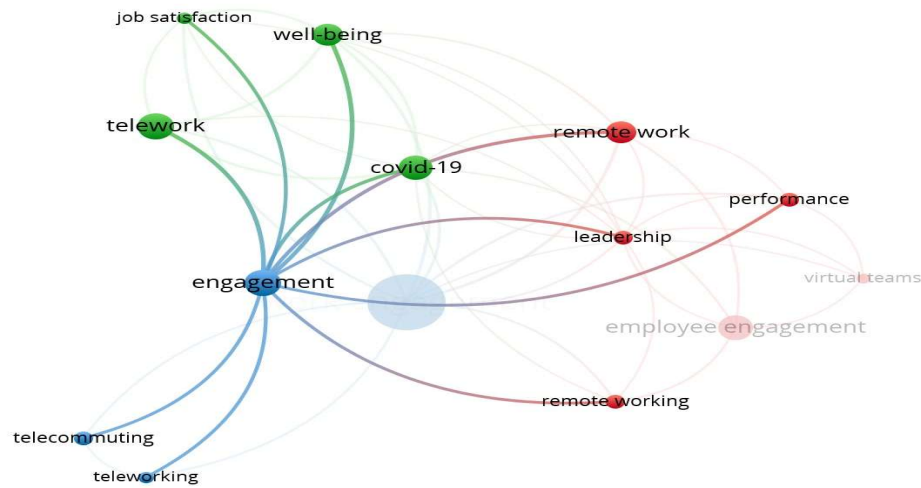


Source: Created by the author using VOSviewer software (Van Eck & Waltman, 2010), based on bibliographic data extracted for analysis

Moreover, the co-occurrence networks also highlight virtual interactions as a central aspect, significantly influencing engagement in telework contexts. The pandemic intensified

the use of virtual tools, which, while enabling the continuity of activities, brought challenges related to the quality of informal interactions and the building of meaningful interpersonal connections at work, as shown below.

Figure 8. Work Engagement Co-occurrence



Source: Created by the author using VOSviewer software (Van Eck & Waltman, 2010), based on bibliographic data extracted for analysis

These findings corroborate the analysis presented in Figure 7, which identified the pandemic as a central theme in recent publications on telework and engagement. Accordingly, the current context underscores the need for integrative approaches that investigate the relationships among individual, organizational, and contextual variables to fully understand work engagement in remote settings, particularly in the present period, which differs from the pandemic era.

**Qualitative thematic analysis at the intersection between telework and work engagement**

Following the bibliometric analysis, this section offers a qualitative content analysis to deepen the understanding of the variables involved in the intersection between telework and employee engagement. By synthesizing these qualitative insights, we aim to identify critical factors, emerging trends, and gaps that warrant further investigation, thereby providing a comprehensive picture of how engagement relates to other variables in remote work contexts.

A cross-sectional review of the objectives and results reported in the publications found that engagement was considered an independent variable in 18 studies. In 13 of these, the mediating effect of engagement was tested in explanatory models involving variables such as job performance, work–family/personal life interface, turnover intention, satisfaction, well-being, and mental health. Figure 9 illustrates the findings regarding the effects of engagement on a range of outcomes in the telework context.

Figure 9. Impacts of engagement on several variables in the telework context

Organizational Support	→ Work engagement →	Organizational Commitment
Job Crafting	→ Work engagement →	Goal Regulation
Remote Work	→ Work engagement →	Job Performance
Flexible Work Arrangements	→ Work engagement →	Job Performance
Transformational Leadership	→ Work engagement →	Job Performance
Technostress	→ Work engagement →	Knowledge Sharing
Supervisor Support	→ Work engagement →	Turnover Intention
Flexibility	→ Work engagement →	Turnover Intention

Work–Family Conflict	→ Work engagement→	Remote Work Productivity
Social Isolation	→ Work engagement→	Life Satisfaction
Work Overload	→ Work engagement→	Life Satisfaction
Work–Family Balance Satisfaction	→ Work engagement→	Mental Health
Virtual Community Trust	→ Work engagement→	Digital Platform Person-Environment Fit
Work Engagement	————→	Turnover Intention
Work Engagement	————→	Team Knowledge Transfer
Work Engagement	————→	Job Performance
Work Engagement	————→	Work–Family Balance
Work Engagement	————→	Job Satisfaction

Source: elaborated by the author

The tendency to consider engagement as a mediating variable reveals important aspects regarding its theoretical role in organizational behavior research. Work engagement is a psychological mechanism explaining how or why one variable affects another. Theoretically, this mediating role reflects engagement as an internal process triggered by specific working conditions (such as those present in telework), constituting not only an outcome of the work experience but also a link between organizational contexts and employee behaviors. Furthermore, including engagement as a mediator aligns with the Job Demands-Resources (JD-R) model, which posits engagement as a central pathway through which job resources and demands translate into positive outcomes (Bakker et al., 2023; Schaufeli, 2021; Schaufeli, 2012; Schaufeli et al., 2006).

Although some studies have analyzed the effects of engagement, most have focused on investigating the antecedents of teleworkers’ engagement, considering it the dependent variable in their models and reflecting current concerns on this issue. After all, what promotes or diminishes engagement in the telework context? The answer encompasses individual and organizational and job-related variables. A total of 20 studies tested and supported the effect of individual variables on engagement. Figure 10 details the individual antecedents of teleworkers’ engagement.

Figure 10. Individual predictors of teleworkers’ engagement

Stress / Technostres	→ Work engagement
Relatedness Needs	→ Work engagement
Sense of Responsibility	→ Work engagement
Organizational Identification	→ Work engagement
Work Attachment Styles	→ Work engagement
Prior ICT Experience	→ Work engagement
Telework Voluntariness	→ Work engagement
Affective Commitment	→ Work engagement
Work Centrality	→ Work engagement
Personality Traits	→ Work engagement
Job Satisfaction	→ Work engagement
Self-Efficacy	→ Work engagement
Mindfulness	→ Work engagement
Altruism	→ Work engagement
Affect	→ Work engagement

Source: elaborated by the author

Among the individual variables, stress and technostress were the most frequently examined, appearing in five studies. The analysis of stress and technostress effects reflects researchers’ growing concern with the psychosocial impacts of digital transformations on workers’ experiences (Barber & Santuzzi, 2015; Gohoungodji, 2023; Grawitch et al., 2018; Santuzzi & Barber, 2018). Stress can undermine the energy and dedication necessary for work engagement. In telework, reliance on digital tools to perform job tasks may lead to anxiety, fatigue, and inefficiency, especially when workers face technical difficulties or lack adequate

support (Charalampous et al., 2019). These factors may diminish enthusiasm and absorption in work, which are essential components of engagement. The choice of many authors to investigate stress and technostress as antecedents of engagement in telework is theoretically grounded in the understanding that these phenomena compromise the psychological resources required for employees to fully engage in their work activities (Barber & Santuzzi, 2015; Gohoungodji, 2023; Grawitch et al., 2018; Santuzzi & Barber, 2018).

Another finding identified in the review is the presence of studies investigating variables quite specific to the telework context, such as the nature of clothing worn during remote work, the presence and interaction with pets in the home environment, and prior experience with information and communication technologies (ICTs). Although the Job Demands–Resources (JD-R) model offers a solid and widely validated theoretical framework for explaining work engagement based on the balance between demands and resources (Schaufeli, 2017; Schaufeli & Taris, 2014), the increasing complexity of remote work arrangements highlights the need to refine this model when applied to virtual contexts. Subtle specificities, such as wearing formal work clothes while at home, the psychosocial effects of pet companionship, or prior familiarity with ICTs, may function as personal resources or as variables that modulate the impact of job demands and resources on engagement. Thus, the contextual detail provided by these studies not only enriches the understanding of factors influencing telework engagement but also offers relevant contributions to the evolution of the JD-R model by evidencing and operationalizing new dimensions and configurations of personal and organizational resources applicable to emerging work realities.

Regarding organizational and job-related variables that impact teleworkers' engagement, the most frequently addressed factors include: characteristics and functioning of the telework model adopted, such as the number of weekly telework hours, type of telework (full-time, hybrid, permanent), telework location, and types of flexibility combined with location flexibility, including time flexibility (13 articles); leadership aspects, including leadership style, various types of leader support, and leader competencies (12 studies); work–family/personal life interaction, such as conflict and enrichment between these life domains (8 studies); social support or social/professional isolation (five studies); and organizational support (five studies). Figure 11 details the organizational and work-related predictors of teleworkers' engagement.

Figure 11. Organizational and work-related predictors of teleworkers' engagement

Work–Family / Personal Life Interface (Conflict, Balance, Enrichment)	→ Work engagement
Leadership (Style, Support, Vertical Leadership, Competencies)	→ Work engagement
Telework Intensity (Hybrid, Full-Time)	→ Work engagement
Family-Supportive Supervisor Behaviors	→ Work engagement
Types of Flexibility in Telework Arrangements	→ Work engagement
Internal Vision Communication	→ Work engagement
Well-Being-Oriented HR Practices	→ Work engagement
Work-from-Home Attire	→ Work engagement
Team Member Trust	→ Work engagement
Work Goal Achievement	→ Work engagement
Team Empowerment	→ Work engagement
Job Performance	→ Work engagement
Job Insecurity	→ Work engagement
Job Crafting	→ Work engagement
Dialogic Communication	→ Work engagement
Organizational Support	→ Work engagement
Professional Isolation	→ Work engagement
Organizational Listening	→ Work engagement
Home Environment Functionality	→ Work engagement

Hierarchical Position	→ Work engagement
Cultural Intelligence	→ Work engagement
Interaction with Pets	→ Work engagement
Social Isolation	→ Work engagement
Agile Work Environments	→ Work engagement
Social Support	→ Work engagement
Overtime Hours	→ Work engagement

Source: elaborated by the author

The specificities of the telework model adopted by organizations, such as weekly hours of remote work, work location, and types of flexibility incorporated into the model, have been studied due to their direct influence on employees' perceived autonomy and flexibility (Allen et al., 2015; Charalampous et al., 2019). These elements affect individuals' ability to manage their tasks and balance personal and professional responsibilities, which are key factors for understanding the impacts on work engagement. Successful engagement in telework appears to depend on providing flexibility and accommodating diverse employee needs (Miglioretti, 2021; Pass & Ridgway, 2022). Increasing employee autonomy, enabling them to take responsibility for their engagement, is a growing trend in telework contexts (Pass & Ridgway, 2022). In this regard, organizations' specific arrangements can help explain the effects observed at individual and team levels.

Regarding leadership, telework has profoundly transformed the roles and responsibilities of managers (Mourão et al., 2021). Flexible work arrangements push leaders to adopt models and practices grounded in mutual trust and results (Iannota et al., 2020; Mourão et al., 2021), challenging more traditional management paradigms. As such, leadership has garnered increasing scholarly attention, as reflected in the number of studies addressing the phenomenon. It has emerged as both a challenging aspect of flexible work arrangements and a key antecedent of engagement in the evolving world of work. Additionally, this review identified a surge in publications during the COVID-19 pandemic. Bogosian and Byrd-Poller (2023) emphasize that the sudden shift to remote work triggered by the pandemic represented a traumatic and disruptive event for many organizations and individuals, leading to distrust, low morale, and turnover in various work contexts. Leadership decisions during this period were critical, particularly those involving return-to-office policies and the creation of psychologically safe work environments.

Work–family/personal life interface is an essential requirement for mental health and a key indicator for assessing the effectiveness of telework (Allen et al., 2015; Hayman, 2005). Achieving balance between work and personal demands is a central concern in telework, as the boundaries between these domains may become blurred (Allen et al., 2005; Melo et al., 2025). Multiple models have been developed to explain the nature and direction of these interactions, distinguishing between conflict and enrichment, and between work-to-family and family-to-work dynamics (Frone, 2003). At the intersection between telework and engagement, the studies focused primarily on work–family conflict and enrichment models, addressing both the positive and negative effects of this interaction.

Regarding organizational and social support, in traditional in-person work environments, social interactions and communication typically involve spontaneous exchanges among team members and immediate support in response to demands (Allen et al., 2015; Sarker et al., 2011). Telework alters the process and dynamics of these social exchanges, affecting collaboration, information sharing, and affective support (Sarker et al., 2011). It is thus understandable that researchers have investigated organizational and peer support as relevant factors in explaining and fostering work engagement.

The findings of this systematic literature review reveal that organizational and job-related variables, such as modality and intensity of telework, schedule flexibility, leadership

support, work–family interface, and both organizational and social support, have been commonly addressed as aspects explaining remote workers’ engagement. This diversity of variables reinforces the core assumption of the Job Demands–Resources (JD-R) model, which posits that engagement results from a balance between job demands and resources (Bakker et al, 2023; Schaufeli, 2017; Schaufeli & Taris, 2014). It is important to emphasize that applying the JD-R model to telework contexts requires conceptual expansion, as remote work redefines what is considered a demand (e.g., blurred boundaries between life domains) and what constitutes a resource (e.g., flexibility or virtual leadership support). The reviewed studies show how operational characteristics of remote work, previously underexplored in traditional models, act as significant determinants of engagement. Moreover, they highlight the relevance of relational and contextual factors amplified or transformed in remote settings, such as social support and a sense of belonging.

Empirical evidence on telework engagement indicates that this phenomenon is shaped by a complex interplay of individual, organizational, and job-related variables. It is not location flexibility alone that drives engagement. One reviewed study emphasizes this point by arguing that not all telework arrangements are inherently beneficial. It highlights the characteristics of high-quality remote work models capable of sustaining or enhancing engagement (Miglioretti, 2021). In this sense, mapping the relationships among individual, organizational, and job-related variables within telework arrangements is essential to synthesizing current findings that were available when this review was conducted.

## **TOWARD AN INTEGRATIVE FRAMEWORK: IMPLICATIONS AND RESEARCH AGENDA**

This review offers a timely synthesis of the evolving research on telework engagement, providing insights into current organizational practices and the broader socio-technological shifts reshaping work in the digital era. As remote work arrangements become increasingly prevalent and complex, understanding the interplay between individual psychological factors, organizational resources, and technological demands is critical for forecasting future trends in workforce management and well-being. By integrating findings across diverse studies, this section proposes an integrative framework highlighting key mechanisms through which technology-mediated work environments influence work engagement. Furthermore, it identifies pressing gaps in knowledge and sets a comprehensive agenda for future research to support sustainable, inclusive, and adaptive telework systems. These insights aim to guide scholars, practitioners, and policymakers in navigating and shaping the rapidly changing work landscape.

Among the most consistent findings are the impacts of work and organizational variables on teleworker engagement. Regarding telework arrangements, the most frequently addressed topic, evidence shows that engagement tends to be positively influenced when combined with other types of flexibility (Miglioretti, 2021; Naqshbandi et al., 2023). However, the number of telework hours still requires further exploration. For example, the number of remote work hours moderates the impact of certain personality traits on engagement, such that higher telework intensity weakens the positive influence of extraversion (Olsen et al., 2023). In contrast, considering the job crafting, a greater number of remote work hours increases the positive impact of cognitive crafting on engagement (Wijngaards, 2022).

Regarding the work–family interface, the impact of family-supportive supervisor behaviors is stronger in high-intensity telework contexts. When the indirect path of these behaviors is tested via work–family enrichment, engagement strengthens as telework intensity increases (Chambel, Castanheira & Santos, 2022). Another significant predictor is the work–family/personal life interface, which can directly impact engagement or mediate the effects of variables such as technostress, work centrality, and family-supportive supervisor behavior.

Leadership has emerged as a central phenomenon in explanatory models, generally exerting a direct influence on engagement, though this influence may be mediated by factors such as perceived stress (Contreras, Baykal, & Abid, 2020).

Although job and organizational variables have been prominent in the literature, only one study addressed human resource management (HRM) practices in predicting engagement, focusing specifically on practices aimed at promoting well-being (Gubernator, Hauff & Günther, 2024). HRM systems drive and sustain valuable organizational capabilities (Demo et al., 2012; Wright & McMahan, 2011), which may be reflected in necessary work resources for teleworkers. These systems are aligned with organizational objectives, strategies, and policies (Demo et al., 2024; Demo et al., 2012). However, the impact of different HRM practices remains underexplored. For example, Pass and Ridgway (2022) emphasize that human resource development practices play a crucial role in developing and supporting employees' skills and in promoting engagement, adaptability, and performance in today's work environment.

It remains unclear how such practices should be adapted to the recent changes in the world of work (Pass & Ridgway, 2022). Strategic human resource management is one of modern organizations' most important competitive advantages (Wright & McMahan, 2011). Hence, future research on teleworker engagement should move beyond focusing solely on isolated HRM practices, such as those targeting well-being or development, and also examine the effects of integrated HRM systems. An integrated view of how different HRM practices influence engagement is essential. In applied contexts, strategic people management is only possible when different policies and practices are interconnected, complementary, and planned within a broader strategic framework (Guerci, Hauff & Gilardi, 2019).

Regarding individual variables influencing teleworkers' engagement, aside from dimensions related to stress and technostress, few studies have systematically incorporated personal characteristics into their explanatory models. The individual-level variables that were examined appeared only sporadically and lacked replication across studies, limiting the development of a robust theoretical foundation on the role of personal resources in telework engagement. This imbalance reveals a significant gap in the literature. In remote work contexts, where collaboration is mainly mediated by digital technologies and individuals face reduced in-person interactions and greater self-management responsibilities, sustained engagement requires favorable work conditions and specific personal competencies. Variables such as resilience, self-discipline, self-management skills, emotional self-regulation, and digital competencies are likely to play a significant role in the context of increased autonomy and workers' growing responsibility for managing their engagement (Kohon et al., 2023; Lopes & Martins, 2011).

While organizational and job characteristics may be more easily influenced by managers, partly explaining their prominence in empirical research, the relevance of personal resources should not be underestimated. These resources may act as crucial moderators or mediators between the organizational context and engagement and may serve as targets for development initiatives, training, and psychological support. Given this scenario, future studies must incorporate individual variables into their models more systematically and comparably. Advancing theory in this direction can contribute to a more integrated and realistic understanding of engagement in digitally mediated work environments, offering evidence-based insights for more effective organizational interventions.

The review findings also point to the opportunity to develop more integrative models sensitive to the specificities of remote work (Contreras et al., 2020). Personal resources that have only recently begun to receive attention, such as prior ICT experience, telework competencies, and voluntariness, can enhance our understanding of telework engagement. Research exploring how these variables mediate or moderate the effects of contextual telework variables on engagement may offer valuable insights for managing remote teams.

From a methodological standpoint, the increase in publications during the COVID-19 pandemic highlights the need for studies that capture post-pandemic telework experiences and conditions, reflecting the realities of today's workforce and organizations rather than the unique and crisis-driven circumstances in which many early studies were conducted. The current context differs significantly from the emergency remote work scenario. Additionally, given the global scale of telework adoption, cross-cultural research that examines how diverse socio-cultural, economic, and institutional factors shape telework practices, employee engagement, and technology acceptance across regions would provide valuable insights. Such transcultural investigations can uncover context-specific challenges, offering richer insights for designing adaptive telework models that accommodate cultural variations and foster inclusive work environments (Gibson & Gibs, 2006; Peters & den Dulks, 2003).

Regarding the studies' design, longitudinal studies are especially useful in observing changes over time. They can help researchers understand how telework affects dynamic variables such as engagement and communication. Capturing daily engagement fluctuations could also provide insights into dynamic contextual factors, such as team communication and social interactions. Advanced statistical methods such as structural equation modeling (SEM) have already been employed to test complex relationships between variables and should continue to support hypothesis testing in future quantitative studies.

The analysis of methodological approaches in telework and organizational behavior research reveals increasing sophistication in research design but also underscores the need for further advancement in several areas. Combining qualitative and quantitative methods, employing longitudinal designs, diversifying samples, and developing telework-specific measures are essential to deepen our understanding of telework's impact on organizational behavior. Addressing these methodological issues will enable the literature to offer stronger and more practical contributions to managing remote and hybrid teams.

While this review has certain limitations, such as the reliance on general rather than domain-specific databases for literature retrieval, the breadth and depth of the analysis offer meaningful contributions to the advancement of knowledge in this field.

## **CONCLUSIONS**

The rapid development of information and communication technologies, combined with the COVID-19 pandemic, has accelerated the transition to remote work arrangements, making telework a central topic of investigation in organizational behavior. This transformation reflects shifts in work design and employee experience and aligns with broader societal and technological trends reshaping the future of work, an area of significant interest for scholars focused on forecasting organizational and social change. This systematic review analyzed 99 studies from the Web of Science (WoS) and Scopus databases that investigated the relationship between telework and work engagement. The review offers an integrated synthesis of previously fragmented empirical evidence, providing a consolidated understanding of the variables that foster or hinder engagement in remote work settings.

Despite advances in understanding the topic, several emerging issues remain to be explored. The findings of this systematic review indicate that engagement in the context of telework is a multifaceted phenomenon shaped by a complex and dynamic interaction among individual, organizational, and job-related variables. Thus, teleworker engagement cannot be attributed solely to organizational resources or favorable working conditions. Instead, it results from the interplay between these elements and individuals' capacities to cope with virtual work environments' unique demands and challenges. By synthesizing the existing evidence, this review offers a valuable foundation for researchers and practitioners seeking to design more effective strategies to foster engagement in technology-mediated work settings.

## REFERENCES

- Akkermans, J., Schaufeli, W. B., Brenninkmeijer, V., & Blonk, R. W. B. (2013). The role of career competencies in the Job Demands—Resources model. *Journal of Vocational Behavior*, 83(3), 356–366. <https://doi.org/10.1016/j.jvb.2013.06.011>.
- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40–68. <https://doi.org/10.1177/1529100615593273>.
- Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior*, 23(4), 383–400. <https://doi.org/10.1002/job.144>.
- Bakker, A. B., & Demerouti, E. (2007). The job demands—resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands—resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 25–53. <https://doi.org/10.1146/annurev-orgpsych-120920-053933>.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD—R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>.
- Barber, L. K., & Santuzzi, A. M. (2015). Please respond ASAP: Workplace telepressure and employee recovery. *Journal of Occupational Health Psychology*, 20(2), 172–189. <https://doi.org/10.1037/a0038278>.
- Boell, S. K., Cecez-Kecmanovic, D., & Campbell, J. (2016). Telework paradoxes and practices: The importance of the nature of work. *New Technology, Work and Employment*, 31(2), 114–131. <https://doi.org/10.1111/ntwe.12063>.
- Bogosian, R. & Byrd-Poller, L. (2023). The Return-to-Office Decision Post- COVID: The Effects on Firm Performance. *Rutgers Business Review*, 8(2), 251-275.
- Chadegani, A. A., Salehi, H., Yunus, M. M. M., Farhadi, H., Fooladi, M., Farhadi, M., & Ebrahim, N. A. (2013). A comparison between two main academic literature collections: Web of Science and Scopus databases. *Asian Social Science*, 9(5). <https://doi.org/10.5539/ass.v9n5p18>.
- Chambel, M. J., Castanheira, F., & Santos, A. (2022). Teleworking in times of COVID-19: the role of Family-Supportive supervisor behaviors in workers' work-family management, exhaustion, and work engagement. *The International Journal of Human Resource Management*, 34(15), 2924–2959. <https://doi.org.ez54.periodicos.capes.gov.br/10.1080/09585192.2022.2063064>.
- Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019). Systematically reviewing remote e-workers' well-being at work: A multidimensional approach. *European Journal of Work and Organizational Psychology*, 28(1), 51–73. DOI:10.1080/1359432X.2018.1541886.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>.
- Clack, W. (2021). Employee engagement and its impact on organizational performance. *Journal of Business Strategy*, 42(1), 15–22. DOI:10.55041/IJSREM42684.
- Contreras, F., Baykal, E., & Abid, G. (2020). E-leadership and teleworking in times of COVID-19 and beyond: What we know and where do we go. *Frontiers in Psychology*, 11, Article 590271. <https://doi.org/10.3389/fpsyg.2020.590271>.

- Delaney, J. T., & Royal, M. A. (2017). A tale of two perspectives: How employees and managers view employee engagement. *Business Horizons*, 60(1), 109–116.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. 143–162). American Psychological Association. <https://doi.org/10.1037/10474-007>.
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524–1541. DOI: 10.1037/0021-9010.92.6.1524.
- Gibson, C. B., & Gibbs, J. L. (2006). Unpacking the concept of virtuality: The effects of geographic dispersion, electronic dependence, Dynamic Structure, and National Diversity on Team Innovation. *Administrative Science Quarterly*, 51(3), 451–495. <https://doi.org/10.2189/asqu.51.3.451>
- Golden, T. D. (2006). Avoiding depletion in virtual work: Telework and the intervening impact of work exhaustion on commitment and turnover intentions. *Journal of Vocational Behavior*, 69(1), 176–187. <https://doi.org/10.1016/j.jvb.2006.02.003>.
- Golden, T. D., & Gajendran, R. S. (2019). Unpacking the role of a telecommuter's job in their performance: Examining job complexity, problem solving, interdependence, and social support. *Journal of Business and Psychology*, 34, 55–69. <https://doi.org/10.1007/s10869-018-9530-4>.
- Gohoungodji, P., N'Dri, A. B., & Matos, A. L. B. (2022). What makes telework work? Evidence of success factors across two decades of empirical research: A systematic and critical review. *The International Journal of Human Resource Management*, 1–45. <https://doi.org/10.1080/09585192.2022.2112259>.
- Grant, C. A., Wallace, L. M., & Spurgeon, P. C. (2013). An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being and work-life balance. *Employee Relations*, 35(5), 527–546. DOI:10.1108/ER-08-2012-0059.
- Gubernator, P., Hauff, S., & Günther, N. (2024). The effectiveness of well-being-oriented human resource management in the context of telework. *The International Journal of Human Resource Management*. <https://doi.org/10.1080/09585192.2024.2354829>.
- Guerci, M., Hauff, S., & Gilardi, S. (2019). High performance work practices and their associations with health, happiness and relational well-being: are there any tradeoffs? *The International Journal of Human Resource Management*, 1–31. <https://doi.org/10.1080/09585192.2019.1695647>.
- Hayman, J. (2005). Psychometric assessment of an instrument designed to measure work-life balance. *Research and Practice in Human Resource Management*, 13(1), 85–91. DOI:10.1891/1061-3749.24.1.5.
- Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences of the United States of America*, 102(46), 16569–16572. <https://doi.org/10.1073/pnas.0507655102>.
- Iannotta, M., Meret, C., & Marchetti, G. (2020). Are flexible work arrangements good for employees? A systematic review and meta-analysis of the effects of telework and flextime on work–family conflict. *International Journal of Management Reviews*, 22(4), 411–431.
- Kirkman, B. L., Rosen, B., Gibson, C. B., Tesluk, P. E., & McPherson, S. O. (2004). Five challenges to virtual team success: Lessons from Sabre, Inc. *Academy of Management Executive*, 18(3), 67–79. DOI:10.5465/AME.2002.8540322
- Kohon, J., de Vries, J., & van Engen, M. (2023). Resilience in remote working: A qualitative study of employee experience and adaptation. *Human Relations*. <https://doi.org/10.1177/00187267231151960>.

- Konradt, U., Schmook, R., & Malecke, M. (2000). Impacts of telework on individuals, organizations and families—a critical review. *International Review of Industrial and Organizational Psychology*, 15, 63–99.
- Kossyva, D., Bozionelos, N., & Nikolopoulos, K. (2023). Employee engagement and firm performance during times of crisis: Evidence from the COVID-19 pandemic. *International Journal of Human Resource Management*, 34(3), 445–472. <https://doi.org/10.3390/su15020987>.
- Kowalski, T. H. P., & Loretto, W. (2017). Well-being and HRM in the changing workplace. *The International Journal of Human Resource Management*, 28(16), 2229–2255.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23(6), 695–706. <https://doi.org/10.1080/09585192.2017.1345205>.
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of Management*, 33(3), 321–349. <https://doi.org/10.1177/0149206307300814>
- Melo, R. P., Neves, P., & Cunha, M. P. (2025). Flexible work arrangements: A review and research agenda. *Academy of Management Annals*.
- Melo, T. A. de, Demo, G., Caneppele, N. R., Barreto, B. S. de B., & Melo, C. de M. (2025). The Office Key Opens the Door to my Home! And Now, Can I (Dis)connect? Quality of Life in Teleworking: Routes, Challenges and Opportunities. *Brazilian Business Review*, 22, 1–23. <https://doi.org/10.15728/bbr.2022.1466.en>.
- Mourão, L., Mendonça, H., Ferreira, M., & Barros, D. (2021). Teletrabalho, liderança e gestão de equipes virtuais: experiências e desafios. *Revista Psicologia: Organizações e Trabalho*, 21(2), 1–14.
- Naqshbandi, M. M., Kabir, I., Ishak, N. A., & Islam, M. Z. (2023). The future of work: work engagement and job performance in the hybrid workplace. *The Learning Organization*, 35(1), 5-26. <https://doi.org/10.1108/TLO-08-2022-0097>.
- Nemteanu, M. S., & Dabija, D. C. (2023). Exploring the effects of teleworking on work engagement: Evidence from Romania. *Employee Relations*, 45(1), 38–56.
- Neuber, L., Englitz, C., Schulte, N., Forthmann, B., & Holling, H. (2021). How work engagement relates to performance and absenteeism: a meta-analysis. *European Journal of Work and Organizational Psychology*, 31(2), 292–315. <https://doi.org/10.1080/1359432X.2021.1953989>
- Olsen, K. M., Hildrum, J., Kummen, K., & Leirdal, C. (2023). How do young employees perceive stress and job engagement while working from home? Evidence from a telecom operator during COVID-19. *Employee Relations: The International Journal*, 45(3), 762–775. <https://doi.org/10.1108/ER-05-2022-0230>.
- Palumbo, R. (2021). Let me go to the office! An investigation into the side effects of working from home on work-life balance. *International Journal of Public Sector Management*, 34(6), 583–602. DOI:10.1108/IJPSM-06-2020-0150.
- Pass, S. & Ridgway, M. (2022). An informed discussion on the impact of COVID-19 and ‘enforced’ remote working on employee engagement. *Human Resource Development International*, 25(2), 254-270. <https://doi.org/10.1080/13678868.2022.2048605>
- Peters, P., & den Dulk, L. (2003). Cross cultural differences in managers’ support for home-based telework: A theoretical elaboration. *International Journal of Cross Cultural Management*, 3(3), 329-346. <https://doi.org/10.1177/1470595803003003005>
- Rafiq, M., Wu, W., Chin, T., & Nasir, M. (2019). The psychological mechanism linking employee work engagement and turnover intention: A moderated mediation study. *Work*, 62(4), 615–628. <https://doi.org/10.3233/WOR-192894>

- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617–635. <https://doi.org/10.5465/AMJ.2010.51468988>.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. <https://doi.org/10.1108/02683940610690169>.
- Salanova, M., & Schaufeli, W. B. (2009). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *International Journal of Human Resource Management*, 20(1), 116–131. DOI: 10.1080/09585190701763982.
- Santuzzi, A. M., & Barber, L. K. (2018). Workplace telepressure and worker well-being: The intervening role of psychological detachment. *Occupational Health Science*, 2, 337–363. DOI:10.1007/s41542-018-0022-8.
- Sarker, S., Ahuja, M., Sarker, S., & Kirkeby, S. (2011). The role of communication and trust in global virtual teams: A social network perspective. *Journal of Management Information Systems*, 28(1), 273–310. <https://doi.org/10.2753/MIS0742-1222280109>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B., & (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716. <https://doi.org/10.1177/0013164405282471>.
- Schaufeli, W. B. (2012). Work engagement: What do we know and where do we go? *Romanian Journal of Applied Psychology*, 14(1), 3–10.
- Schaufeli, W. B. (2013). What is engagement? In C. Truss et al. (Eds.), *Employee Engagement in Theory and Practice*. Routledge.
- Schaufeli, W. B. (2017). Applying the Job Demands-Resources model. *Organizational Dynamics*, 46(2), 120–132. <https://doi.org/10.1016/j.orgdyn.2017.04.008>.
- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the Job Demands-Resources model: Implications for improving work and health. In G. F. Bauer & O. Hämmig (Eds.), *Bridging Occupational, Organizational and Public Health* (pp. 43–68). Springer. [https://doi.org/10.1007/978-94-007-5640-3\\_4](https://doi.org/10.1007/978-94-007-5640-3_4).
- Stahl, G., Maznevski, M., Voigt, A. et al (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups. *Journal of International Business Studies*, 41, 690–709. <https://doi.org/10.1057/jibs.2009.85>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology*, 70(1), 16–59. DOI:10.1111/apps.12290.
- Wijngaards, I., Pronk, F. R., Bakker, A. B., & Burger, M. J. (2022). Cognitive crafting and work engagement: A study among remote and frontline health care workers during the COVID-19 pandemic. *Health Care Management Review*, 47(3), 227-235. <https://doi.org/10.1097/HMR.0000000000000322>.
- Zahari, S. S., & Kaliannan, M. (2022). Employee engagement during COVID-19: A systematic review. *Journal of Organizational Effectiveness*, 9(1), 29–47. DOI:10.3390/su15020987.

Stahl, G., Maznevski, M., Voigt, A. et al (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups. *Journal of International Business Studies*, 41, 690–709. <https://doi.org/10.1057/jibs.2009.85>