

A systematic review on the effects of remote working on social support and well-being

Final report for the attention of the
Federal Office of Public Health and Health Promotion Switzerland

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ABSTRACT (EN)

This systematic review summarizes the scientific evidence on the relations between remote work, social support, and well-being. Following the PRISMA guidelines, we searched through three databases (Web of Science, EBSCOhost, and ProQuest) for peer-reviewed articles on this topic in English or French published before June 2024. We included 32 high-quality studies, of which 23 used quantitative data and 9 used a qualitative or mixed methodology. We provide an account of the main findings of the studies and the 97 hypotheses tested by the quantitative articles. Overall, 60% of analyses that directly test a link between teleworking, social support or well-being find a significant relationship. The results are very divided, with 51% of studies reporting an increase in positive outcomes due to teleworking (e.g., work engagement) and 49% reporting negative outcomes (e.g., negative emotions or stress). Through a Qualitative Content Analysis (QCA) of the results and conclusive sections of all studies, we conducted an in-depth analysis of the mechanisms through which remote work affects social support and, consequently, the well-being of workers. Our QCA reveals five mechanisms that narratively bring together these links. The first is called *destabilization* and refers to changes in daily routines caused by new remote working habits, which can hinder coordination and support. *Bridging* captures how digital tools can facilitate the creation of new and broader ties within geographically dispersed organizations. *Ambivalence* reflects the fine line between social support and surveillance, especially when there is a lack of trust in supervisors. *Dormancy* refers to the weakening of face-to-face interactions, which sometimes reduces support but also protects against negative ties. Finally, *transfer* captures the shift of many aspects of office life into the domestic sphere, including work interruptions, conflicts, but also forms of support. Overall, our analysis offers new insight into how remote work is reshaping relational life and suggests priorities for research and labor policy.

ABSTRACT (FR)

Cette revue systématique résume les preuves scientifiques sur les relations entre le télétravail, le soutien social et le bien-être individuel. En suivant les lignes directrices PRISMA, nous avons effectué une recherche dans trois bases de données (Web of Science, EBSCOhost et ProQuest) pour des articles scientifiques, quantitatifs et qualitatifs, en anglais ou en français, publiés avant juin 2024. Nous avons inclus 32 études de haute qualité, dont 23 utilisaient des données quantitatives et 9 une méthodologie qualitative ou mixte. Nous présentons les principaux résultats des études ainsi que les 97 hypothèses testées par les articles quantitatifs. Globalement, 60 % des analyses qui testent directement un lien entre télétravail, soutien social ou bien-être trouvent une relation significative. Les résultats sont très partagés : 51 % des études rapportent des effets positifs du télétravail (par exemple, engagement au travail) et 49 % des effets négatifs (par exemple, émotions négatives ou stress). À travers une analyse qualitative de contenu des sections résultats et conclusions de toutes les études, nous mettons en évidence cinq mécanismes par lesquels le télétravail influence le soutien social, et par conséquent le bien-être des travailleurs. Le premier, appelé *déstabilisation*, fait référence aux changements de routines causés par le télétravail, qui peuvent freiner la coordination et le soutien. *Bridging* montre comment les outils numériques permettent de créer de nouveaux liens au sein d'organisations géographiquement dispersées. *Ambivalence* désigne la ligne ténue entre soutien social et surveillance, notamment en cas de manque de confiance dans les supérieurs. *Dormancy* renvoie à l'affaiblissement des interactions en présentiel, ce qui réduit parfois le soutien, mais protège aussi contre les tensions. Enfin, *transfert* décrit le déplacement de nombreuses dynamiques de bureau dans la sphère domestique, incluant interruptions, conflits, mais aussi formes de soutien. Notre analyse apporte ainsi un éclairage nouveau sur la manière dont le télétravail transforme la vie relationnelle et suggère des priorités pour la recherche et les politiques du travail

ABSTRACT (IT)

Questa revisione sistematica riassume le evidenze scientifiche sulle relazioni tra lavoro a distanza, supporto sociale e benessere. Seguendo le linee guida PRISMA, abbiamo condotto una ricerca in tre banche dati (Web of Science, EBSCOhost e ProQuest) cercando articoli peer-reviewed in inglese o francese, pubblicati prima di giugno 2024. Sono stati inclusi 32 studi di alta qualità, di cui 23 basati su dati quantitativi e 9 con metodologia qualitativa o mista. Presentiamo i principali risultati degli studi e le 97 ipotesi testate dagli articoli quantitativi. Complessivamente, il 60% delle analisi che testano direttamente il legame tra telelavoro, supporto sociale o benessere mostra una relazione significativa. Tuttavia, i risultati sono molto divisi: il 51% degli studi riporta effetti positivi legati al telelavoro (es. coinvolgimento lavorativo), mentre il 49% rileva alcuni aspetti negativi (es. emergenza di emozioni negative o stress). Attraverso un'analisi qualitativa dei contenuti delle sezioni risultati e conclusioni di tutti gli studi selezionati, abbiamo identificato cinque meccanismi tramite cui il lavoro a distanza influenza il supporto sociale e, quindi, il benessere dei lavoratori. Il primo è chiamato *destabilizzazione* e si riferisce ai cambiamenti nelle routine quotidiane che possono ostacolare il coordinamento e il supporto nelle imprese. *Bridging* descrive come gli strumenti digitali facilitino la creazione di legami tra lavoratori, specialmente in organizzazioni geograficamente dislocate. *Ambivalenza* indica la sottile linea che divide supporto e sorveglianza, specie in presenza di scarsa fiducia nei supervisori. *Dormancy* fa riferimento all'indebolimento delle interazioni faccia a faccia, che talvolta riduce il supporto, ma può anche proteggere da relazioni difficili sul lavoro. Infine, *trasferimento* indica il passaggio di molte dinamiche tipiche dell'ufficio nella sfera domestica, comprese interruzioni, conflitti e nuove forme di supporto. L'analisi complessiva offre nuove prospettive su come il lavoro a distanza stia rimodellando la vita relazionale e suggerisce priorità per la ricerca e le politiche del lavoro.

ABSTRACT (DE)

Diese systematische Übersicht fasst den wissenschaftlichen Erkenntnisstand zu den Zusammenhängen zwischen Remote-Arbeit, sozialer Unterstützung und individuellem Wohlbefinden zusammen. Nach den PRISMA-Richtlinien durchsuchten wir drei Datenbanken (Web of Science, EBSCOhost und ProQuest) nach englisch- oder französischsprachigen, peer-reviewten quantitativen und qualitativen Studien, die vor Juni 2024 veröffentlicht wurden. Insgesamt wurden 32 hochwertige Studien einbezogen, davon 23 mit quantitativen Daten und 9 mit qualitativer oder gemischter Methodik. Wir stellen die wichtigsten Ergebnisse dieser Studien sowie die 97 von den quantitativen Arbeiten getesteten Hypothesen dar. Insgesamt zeigen 60 % der Analysen, die einen direkten Zusammenhang zwischen Telearbeit, sozialer Unterstützung oder Wohlbefinden untersuchen, eine signifikante Beziehung. Die Ergebnisse sind gespalten: 51 % der Studien berichten über positive Auswirkungen der Telearbeit (z. B. Arbeitsengagement), 49 % über negative Auswirkungen (z. B. Stress oder negative Emotionen). Mithilfe einer qualitativen Inhaltsanalyse der Ergebnis- und Schlussfolgerungsabschnitte aller Studien identifizieren wir fünf Mechanismen, durch die Remote-Arbeit soziale Unterstützung und damit das Wohlbefinden beeinflusst. Der erste Mechanismus, *Destabilisierung*, beschreibt die Veränderung alltäglicher Routinen durch neue Arbeitsgewohnheiten, die Koordination und Unterstützung erschweren können. *Bridging* bezeichnet die Möglichkeit, durch digitale Tools neue und breitere Kontakte in geografisch verteilten Organisationen aufzubauen. *Ambivalenz* beschreibt die feine Grenze zwischen Unterstützung und Überwachung, insbesondere bei mangelndem Vertrauen in Vorgesetzte. *Dormancy* verweist auf das Nachlassen persönlicher Interaktionen, was sowohl Unterstützungsverluste als auch Schutz vor belastenden Beziehungen bedeuten kann. Schließlich beschreibt *Transfer* die Verlagerung vieler Aspekte des Büroalltags in den häuslichen Bereich, einschließlich Unterbrechungen, Konflikten, aber auch neuer Unterstützungsformen. Insgesamt bietet unsere Analyse neue Einblicke in die Umgestaltung des Beziehungslebens durch Telearbeit und legt Prioritäten für Forschung und Arbeitsmarktpolitik nahe.

1. INTRODUCTION

Remote work has reached extraordinary levels in many countries of the world, and Switzerland is no exception. According to the Swiss Federal Statistical Office, remote work has increased by 86% over the past ten years. Today, nearly 40% of the Swiss workforce engages in telework for at least a portion of their overall working time. These are significant figures for an economy that relies on a highly skilled labor force—one of the social groups most inclined to adopt remote working (Chung, 2024). Not surprisingly, nearly 59% of those who today work remotely in Switzerland hold a university degree (Swiss Federal Statistical Office, 2025).

Switzerland is part of a powerful and global transformation. What we are witnessing is the persistence of remote and flexible work arrangements that were originally adopted in response to the COVID-19 pandemic (Barrero et al., 2021). Remote work has not returned to the marginal role it once held. For example, in the United States, remote work accounted for only 7% of total workdays before 2020; by April 2025, this figure had risen to 29%. In Europe and North America, more than 100 million workers now engage in remote work, around 70% of whom do so in hybrid mode (Bloom et al., 2024). This represents an extraordinary increase—often more than four times pre-pandemic levels. And these numbers are not confined to Western societies: today, remote work is also widespread in large emerging markets such as India and Nigeria (The Economist, 2025)¹. This ongoing transformation, in which Switzerland is fully embedded, demands careful investigation of its mechanisms, inequalities, and specific dynamics.

Telework, remote or flexible work refers to all those set of practices that determine where, when, and for how long people work outside traditional office settings. It is not a new practice—working from home dates back as far as the 1960s—but the pandemic has brought it to the forefront, raising new questions. One of the most debated aspects is how this is transforming the functioning of families and organizations, and what the consequences are for key issues such as productivity and employee well-being (Vacchiano et al., 2024). Spending more time at home or in the office, in front of a screen, or in a coworking space is not a trivial shift—it alters

¹ By contrast, some East Asian countries—such as China, Japan, and South Korea—remain more reluctant to adopt such flexible work models

how people interact and exchange resources: information, practical help, mentoring, or personal conversations. These relational processes have far-reaching implications for how people function in their daily lives and for one of the drivers of well-being and innovation: social support (Kawachi & Berkman, 2000).

Yet the existing knowledge on this topic remains fragmented. We still lack a systematic synthesis that can clarify how remote work affects the exchanges of social support among family members, partners, supervisors and colleagues, and what the consequences are for workers' health and well-being. To address this gap, this systematic review synthesizes this body of evidence searching for peer-reviewed articles published from January 2000 to June 2024 in English and French. Following the PRISMA guidelines and based on a registered research protocol (Vacchiano, Fernandez, Fernandez-Garcia, 2025), this review explores the following research questions: Does remote working have positive or negative effects on social support? Through what specific processes do these effects manifest? What are the social mechanisms that act as triggering causes of the links between remote work, social support and well-being?

By bringing together findings from both qualitative and quantitative studies, this review clarifies how different forms of remote work—e.g., hybrid or fully remote—shape the dynamics of social support and, in turn, influence well-being. In doing so, it contributes to a more nuanced understanding of the social consequences of remote work in Switzerland and, overall, in contemporary societies.

1.1 What does social support mean and why it matters?

What we know is that remote work influences well-being through a variety of mechanisms. For instance, having a suitable workspace appears to have a direct positive effect on workers' health: access to natural light, a comfortable workstation, or a pleasant view can all contribute to improved well-being (e.g., Bergefurt et al., 2022). However, it is not only about *where* one works: it also matters *how much* and *in what ways*. Today, remote work takes many forms. Working exclusively from home is not the most widespread model: in several countries, only about 10% of the workforce works fully remotely (Barrero et al., 2023). Hybrid work is much more common and have made “telework intensity” more complex (Bloom et al., 2024). Some people work remotely just one day a week, others two, three, or four days, spending the rest of their time in the traditional office. This intensity shapes

how remote work affects people's health, daily life, and overall well-being. In addition, what also matters is how the autonomy intrinsic in any remote work activity is managed by employers and workers themselves. The literature has long debated the tendency to work more while doing it remotely, either because people freely want (or feel the pressure) to do so. This is the so-called *flexibility paradox* (Chung, 2022). Overall, the effects of these dynamics also depend on workers' characteristics: such as gender, age, professional status and parenthood, among the most relevant factors (Vacchiano et al., 2024).

Alongside these direct mechanisms, there are also indirect ones. This means that remote work sets in motion behaviors that influence other factors, which in turn affect health and well-being. Among the most frequently mentioned is the reduction of commuting time, often associated with positive outcomes for well-being (Beigi et al., 2024). In this review we focus in particular on those indirect mechanisms related to social interactions. Spending more time at home, online, and less time in the office, can reshapes many relational dynamics. We know that all these mechanisms are linked to well-being, mental health, and life satisfaction: at the center of these processes is social support, long recognized as one of the most important social determinants of health (Kawachi & Berkman, 2000). Social support can take many forms, but at its core, it refers to a process in which one person provides resources—information, energy, time, or empathy—to help another. In both family and workplace contexts, these resources may take the shape of guidance, mentoring, supervision, or simple listening and showing understanding toward a colleague facing personal issues. In this sense, social support is a multidimensional concept, partially linked to the idea of social capital (Lin, 2002).

There are two main dimensions to consider in understanding how social support relates to well-being, and how this relationship is influenced by remote work. The first concerns (1) access to these “resources from others.” Social support is not an individual asset: its potential lies in the number and quality of social ties a person can rely on. More meaningful relationships mean more available resources and, potentially, greater well-being. The second dimension, probably most important here, is the (2) mobilization of those resources—how they are actually exchanged, activated, and circulated through everyday interactions. Access alone is not enough: the quality of support depends on how people communicate, how much time they spend together, and how they structure their interactions. This is why analyzing remote work is key: it profoundly alters time use and relational patterns.

It changes the frequency, duration, and mode of contact—whether in person, online, formally, or informally. It impacts both the structure and the content of social relationships. Remote work can reduce spontaneous encounters, limit informal exchanges, or filter communication through digital platforms.

This review places social support at the core of the investigation into remote work and well-being. Not only as a protective factor for individuals *per se*, but as a relational process shaped by how people spend time together, communicate, and exchange resources through social ties. The processes we focus on in this review are therefore those through which remote work influences such forms of support that emerge in family and organizational life—whether as emotional aid, practical help, trust, or mentoring. Some studies also explore the so-called “dark side” of social support: the absence of help, the perception of being neglected, or experiences of exclusion and harassment (Lin, 2022; Villalonga-Olives & Kawachi, 2017). These dimensions are essential to understanding the multiple pathways through which remote and flexible working can affect people’s lives. Looking at remote work through this lens helps us better capture its transformations and understand how new ways of working are reshaping professional life.

2. DATA AND METHODS

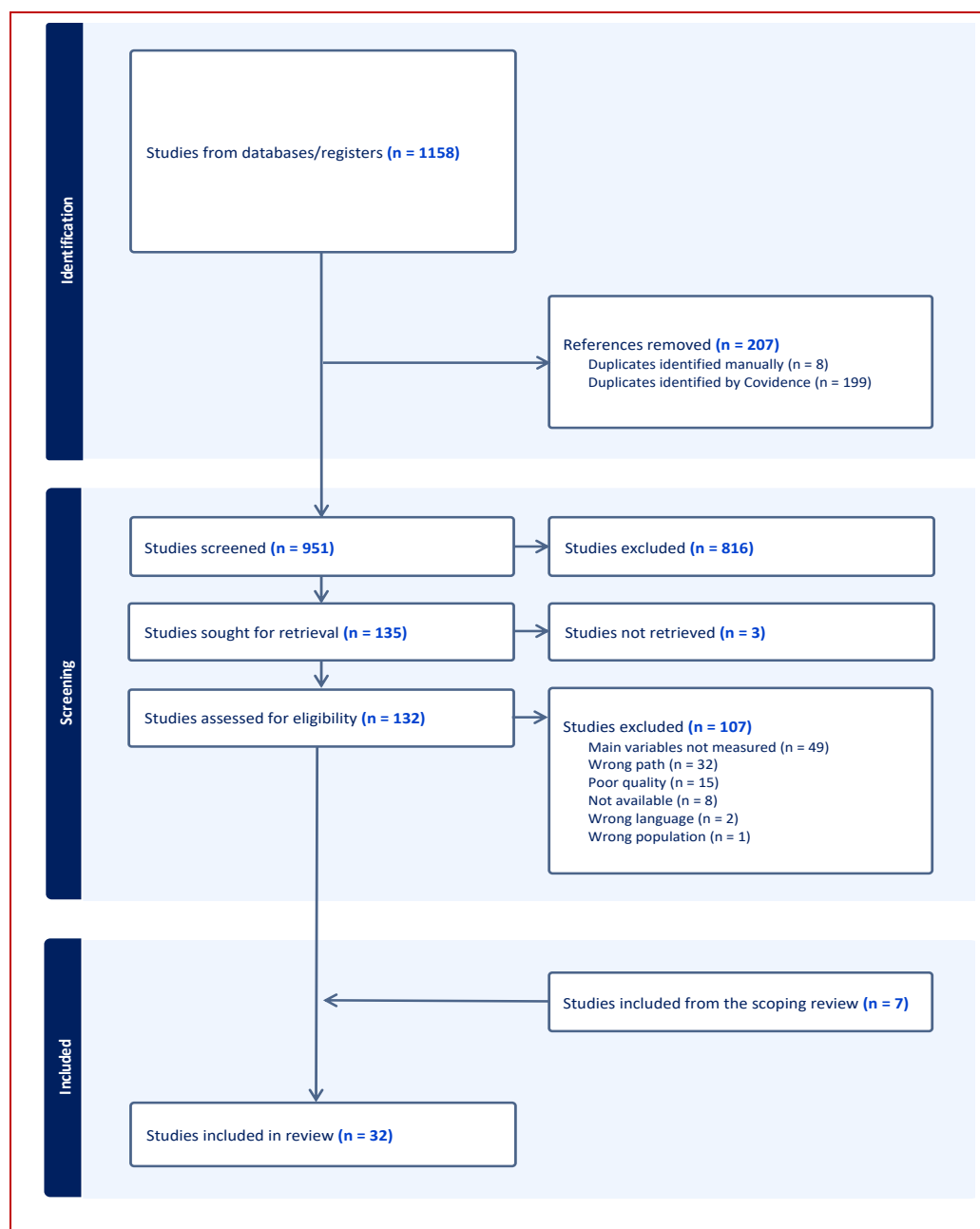
2.1. Study selection and eligibility criteria

This systematic review was conducted following the registered protocol (Prospero: CRD42024554590), which was published after a double-blind peer review in January 2025 on BMJ Open (Vacchiano, Fernandez, Fernandez-Garcia, 2025). In accordance with the PRISMA guidelines (Boutron et al., 2020), this protocol includes all the objectives of this systematic review, its conceptualization and the methodological strategy, which we refer to here in summarized form and which we invite to consult.

2.2. Search strategy and data extraction

As explained in our research protocol, the search strategy of this systematic review is to update the work of a previous scoping review, which first created a database of articles addressing more generally the relations between telework and well-being from January 2000 until December 2022 (Vacchiano et al., 2024). Among the many circumstances identified through which telework impacts well-being, this systematic review selects precisely only those articles that address the transmission of social support as a mediating mechanism in this initial time period. We therefore searched through Web of Science Core Collection, Sociological Abstracts (PROQUEST) and SocINDEX (EBSCOhost) those works dealing with such mechanism from December 2022 to June 2024. We found 1851 articles in these 18 months addressing generally the relations between telework and well-being and, of those, we selected only those articles studying specifically social support.

This process of selection was carried out using Covidence systematic review software (Veritas Health Innovation, 2016). The screening phase was performed in two stages: one for abstracts and another for full text. In the study selection stage, 20% of the papers were reviewed by three authors (MV, GF, JFG) and discussions were initiated until an 80% agreement rate was reached. The remaining documents were then examined by two authors (GF, JFG). Subsequently, in order to address potential biases, a quality assessment was performed using selected studies through the following tools: the Critical Appraisal Skills Program (CASP) and the McGill Mixed Methods Appraisal Tool (MMAT) for mixed methods studies (Hong et al., 2018). For data extraction, only articles considered to be of high-quality after assessing them with such tools were taken into consideration. The results of the screening phases are displayed in Figure 1.

Figure 1. PRISMA flow diagram

2.3. Analytical strategy

Our analytical strategy consists of a descriptive phase and a data analysis phase. In the first one, we provide an overview of the main findings of this body of research. The information on the characteristics of the 32 selected articles has been catalogued, both in terms of their formal (e.g., country where the study was conducted) and methodological aspects, as well as quantitative evidence. Because

this systematic review applies to a diverse body of research, including both quantitative and qualitative studies, it also presents a wide range of indicators used to operationalize the concepts of social support and well-being. Given such heterogeneity, a meta-analysis of the quantitative evidence was excluded from the outset of the conceptualization of our analytical design (Page et al., 2021). However, this did not prevent us from cataloguing the significance and directionality that quantitative studies have found regarding the effect that remote work has on social support and well-being (Table A and Table B, Appendix) For the benefit of the reader, we have summarized such quantitative evidence and the formal characteristics in one infographic (Figure 2).

The analytical part of this systematic review was performed using Qualitative Content Analysis (hereafter QCA) (Scheirer, 2024). We analysed the narrative material extracted from the results and conclusions sections of each of the thirty-two selected studies in three rounds of analysis. In the first round we conducted a pre-coding of the empirical material, with a focus on the research question: *“What kinds of concepts and operationalizations emerge regarding teleworking modalities, social support, and well-being?”* To systematically explore the interplay between these three dimensions, we created a synthesis table organizing key constructs across the studies. This table included categories related to teleworking—such as intensity, work environment, equipment, and worker characteristics—forms of social support—such as emotional and instrumental support, isolation, trust, or negative interactions—and indicators of well-being. This step ensured an initial structuring of the data and facilitated a systematic comparison across sources.

The objective of the second round was to identify emerging links between the categories coded in the first phase. The guiding question was: *“What kind of paths emerge between the concepts and operationalizations identified in the first round?”* In this stage, we qualitatively analyzed the content of the synthesis table to identify regularities and plausible connections across the three dimensions. The aim was to reconstruct the analytical paths that link teleworking conditions to specific forms of social support and, in turn, to outcomes in well-being. Through this process, we highlighted recurrent patterns involving the role of key actors—such as managers, colleagues, partners, or family members—as well as contextual features like organizational structures or social policy frameworks. These elements helped us move from conceptual categories to more interpretative insights, laying the groundwork for identifying broader explanatory mechanisms.

The third phase aimed to identify the underlying mechanisms driving the paths observed in the second round. The research question guiding this step was: *What type of mechanism emerges as the driver of the paths identified in the second round?* In this phase, the paths previously outlined were systematized with the aim of isolating a triggering cause—an underlying logic that qualitatively explains how and why specific links between teleworking, social support, and well-being occur. Through a progressive process of abstraction and reduction of narrative complexity, this round allowed for the refinement of patterns into more generalizable mechanisms. The goal was to move beyond contextual descriptions and toward analytical constructs that can be transferred across different professional sectors and national settings, offering a framework for comparative understanding

Table 1. Qualitative content analysis: coding procedure

	1st round	2 nd round	3rd round
Aim	Pre-coding	Linkages	Logics
Research question	How are telework, social support, and well-being operationalized?	What kinds of pathways emerge between the identified constructs?	What types of triggering mechanisms underlie the pathways identified?
Description	Constructs related to telework (e.g., intensity, work environment, teleworker characteristics), social support (e.g., emotional support, trust, negative interactions), and well-being (e.g., mental health, quality of life) were systematically organized in a synthesis table.	The synthesis table was qualitatively analysed to identify patterns and regularities linking the three dimensions. Recurring elements such as types of social contact, organizational context, and relevant social policies were identified.	Further abstraction was conducted to identify mechanisms generalizable across various contexts and professional sectors.

3. RESULTS

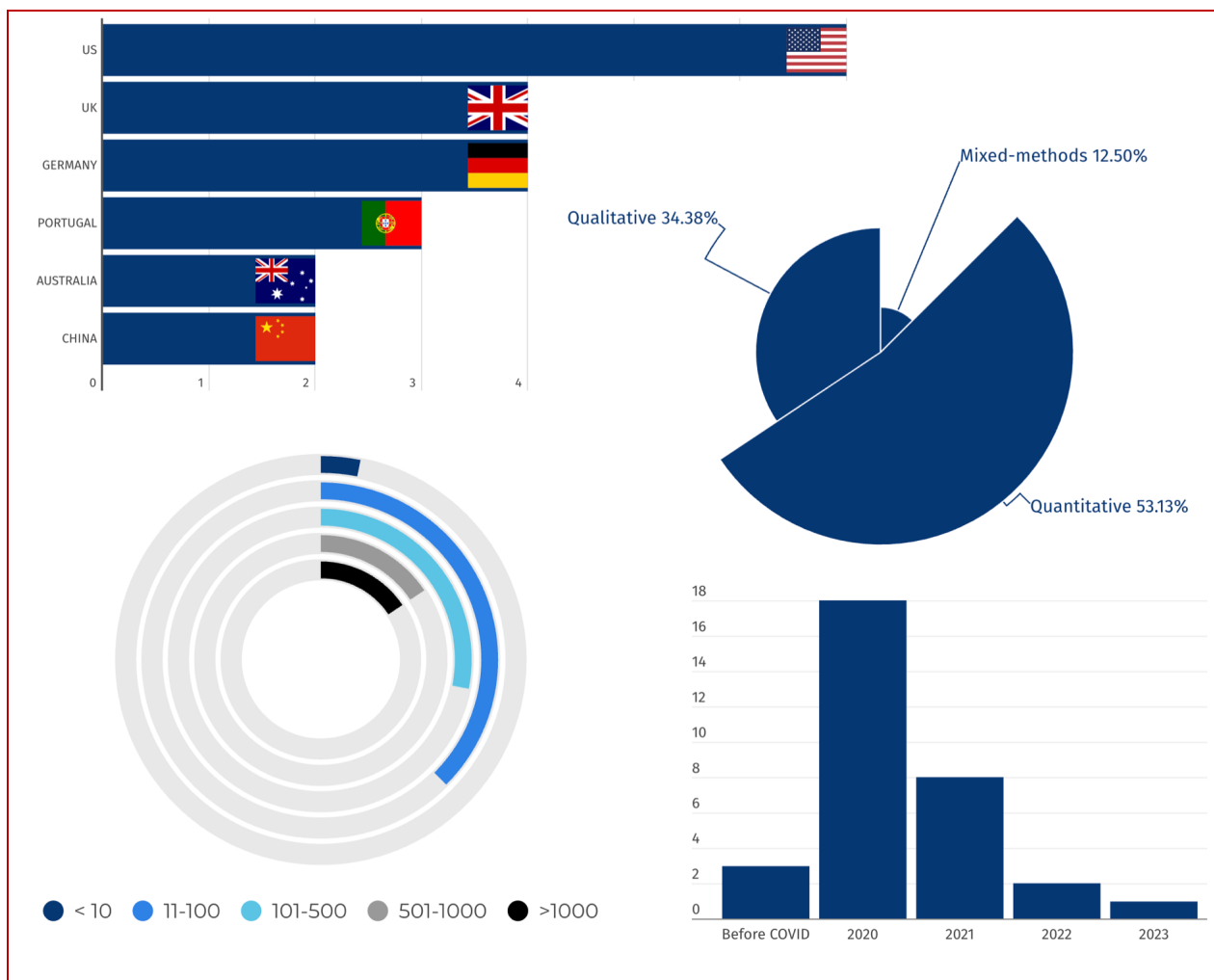
3.1 Overview of the results: description of the included studies

A total of 32 papers were included in this systematic review, as shown in the PRISMA flow diagram (Figure 1). Among these studies, those using quantitative methods were predominant, accounting for 53.1% of all the selected articles, followed by studies using qualitative (34.4%) and mixed-methods design (12.5%). Taking in account such heterogeneity, most articles primarily consisted of cross-sectional studies (68.8%), while 31.3% of the studies could analyse data over time by implementing a longitudinal design (31.3%). The most common sample size range was 11–100 participants (37.5%), followed by 101–500 (28.1%), and 501–1000 and >1000 participants each representing 15.6% of studies. Only one study (3.1%) reported a sample size of fewer than 10 participants. Most of the studies started their data collection during the COVID-19 pandemic. More than half (56%) did it over 2020, and 25% during 2021. Finally, the studies were conducted in 23 different countries or areas. The top five countries are countries: United States (7 studies), Germany and United Kingdom (4 studies), Portugal (3 studies), and Australia and China (2 studies). All other countries occur only once in our data set.

A detailed summary of these studies is displayed in the Appendix (Table A), including their authorship, aims and objectives, country and main findings. Most articles research on very different populations, in terms of country and economic sector. While most qualitative articles focus on different populations of teleworkers, quantitative studies put a greater focus on the comparison between teleworkers and on-site workers (or within teleworkers by their intensity). All of the articles acknowledged the complexity of heterogeneous concept such as well-being. Under such umbrella concept, studies address quality of life (Beigi et al., 2024), loneliness (Bollestad et al., 2022), exhaustion (Chambel et al., 2023), job satisfaction (Chen et al., 2023), stress (Daneshfar, 2023), self-rated health (Fiorini, 2023), work engagement (Klebe & Felfe, 2023), composite indices of mental health and well-being (Kröner & Müller, 2023), and depressive symptoms (Yu et al., 2022). In some cases, for example in Rohwer et al. (2024) and Oakman et al. (2023), studies address the same issue relying on standardized scales (e.g., PHQ-9, UWES-5; WHO-5 well-being index, MOAQ, etc.), or *ad hoc* measurements (Badura et al. 2023, Brooks et al., 2022; Ki & Lee, 2024). Qualitative studies address well-being looking at the challenges, opportunities, and benefits of the transition to telework linked to relational dynamics, be it in the case of the general population (e.g., Beigi

et al., (2024) looked into adjustment to telework by dual-earner households) or specific groups of interest (e.g.: Tomczak et al., 2022 for employees with autism; Werkmeister et al. (2023) for mental health clinicians)

Figure 2. Infographic showing the study characteristics. Top left: the most represented countries; bottom left: the size of the sample. Top right: the type of methodology used; bottom right: the year in which the data collection started



Overall, studies' results show mixed findings. Many studies, both qualitative and quantitative, acknowledge a direct positive impact of telework in well-being. However, the indirect effect of telework on well-being seems to be multifaceted, and the result of various mechanisms and triggering factors — which we discuss in depth in the 3.2. section

Table B (Appendix) presents, for each quantitative study, all the 97 tested hypothesis between remote work, social support, and well-being, including the direction and statistical significance of each one of them. Among these studies, the direct effects of telework on social support are evenly distributed: two studies report positive effects, two report negative effects, two show mixed findings, and three find no significant associations. All studies measure teleworks exclusively in terms of intensity—either as the number of remote working hours, its occurrence, or changes in its frequency. The same variability is observed in how social support is conceptualized (Holt-Lunstad, 2018). In the studies included in this systematic review, it appears in various forms: as general organizational support, emotional and instrumental support, or overall trust in others. Some studies also address negative relational dynamics associated with the “dark side” of social support (Portes, 2014; Pietromonaco & Collins, 2017), including harassment, bullying, interruptions, or social withdrawal characterized by a lack of support or interaction. A detailed overview of which studies adopt which operationalization is provided in Table 2.

Regarding the relationship between telework and well-being, studies have a mix of positive direct effect (Chen et al. (2023), Giacomelli et al. (2023), Golden (2006), Parent-Lamarche & Saade (2024), negative (Wang et al., (2023)), mixed (Bollesstad et al. (2022), Yu et al. (2022)) or non-significant (Chambel et al. (2023)) effects. When examining all three dimensions together—telework, social support, and well-being—ten studies investigate moderation effects, while five explore mediation pathways. From the latter, two find positive indirect paths through social support (Bollesstad et al., 2022), Parent-Lamarche & Saade, 2024) and one a negative path (Wang et al., 2023). Generally, the studies on the mediation effects point to telework reducing negative interactions, which then enhances well-being. Moderation effects generally highlight the protective role of supervisors or colleagues in buffering the loss of social ties. Three studies find that social support buffers negative impacts of telework or amplifies the positive ones (Chambel et al., 2023, Klebe & Felfe, 2023), Lopes et al. 2024) while none finds a negative moderation relationship. However, three studies find both positive and negative processes depending on the social support dimension and outcome (Kaltainen & Hakanen (2024), Oakman et al. (2023), Yu et al. (2022)) and another six report no significant moderation or mediation, while one study identifies a negative mediation effect and other reports both positive and negative pathways.

3.2 Five mechanisms linking telework, support and well-being.

The Qualitative Content Analysis was conducted in three subsequent rounds, through which we identified five mechanisms linking the path between telework activities, different form of social support, and well-being. These triggering mechanisms are synthesized in Table 2.

Table 2. Five mechanisms linking telework, social support and well-being

Mechanisms	Description
<i>Destabilization</i>	A rapid shift to remote work, without adequate preparation, can erode established routines and organizational structures. The lack of in-person coordination can generate confusion and hinder role clarity. Without deliberate efforts to maintain structure—through clear communication and supervisory presence—opportunities for support diminish, negatively affecting well-being.
<i>Bridging</i>	Teleworking can expand workers' social networks by enabling new connections via digital tools. Online platforms facilitate interactions with geographically distant colleagues, creating “bridging ties” that enhance access to diverse instrumental and emotional resources. This increased connectivity strengthens social support and has a positive effect on well-being.
<i>Ambivalence</i>	There is a fine line between supportive behaviors and the perceptions of being under surveillance. In a work environment characterized by low trust among colleagues, increased communications and guidance may simultaneously create stress and reduce well-being due to feeling of pressure or constant availability demands.
<i>Dormancy</i>	Reduced face-to-face interactions weakens social ties, leading to “dormant” relationships and diminished support. Digital tools help maintain contact but often fall short of nurturing deeper bonds. However, distancing may also shield workers from negative interactions such as forms of bullying, resulting in a mixed impact on well-being.
<i>Transfer</i>	Telework reshapes the boundary between work and private life by relocating social interactions—both supportive and conflicting—from the office to the home. What once occurred at the workplace (e.g., interruptions to work activities) now emerges in the household. This shift can increase access to support from family members, but also amplify work–family conflict.

3.2.1 Destabilization

We have called the first mechanism “*destabilization*”. Several articles show that one triggering cause of psychological distress was due to the abrupt shift to remote and flexible working without training, appropriate equipment and clear guidance. The reason is that as a consequence of such shift the organization of employees ‘social and professional life loses structure — in relation to changing working hours, tasks to be performed and opportunities for socialization. This can cause a feeling of being overwhelmed and tired, as shown by eleven studies (e.g., Bollesstad et al., 2022; Anderson et al., 2022; Brooks et al., 2022; Giacomelli et al., 2023; Ki and Lee, 2024). Many authors suggest that, to avoid such negative consequences, the role of the organization and the support of superiors can help employees manage these transitions. Support, in this case, can be understood as the provision of concrete equipment (Singh et al., 2024), but also the ability to provide employees with structured socialization opportunities (Wang et al., 2023), which bring order and routine to new habits. Regarding this triggering mechanism, for example, in Singh et al. (2024), a sample of nineteen British psychologists reported difficulties due to the lack of clear guidance from the board of directors on how to perform therapies online, so to facilitate the transition from on-site to remote work. Moreover, Scales and colleagues (2021) using data from twenty-four public health professionals shows that difficulties arising from inadequate IT support in the provision of effective online equipment or tools, such as personal computers, thus leading to forms of social disorganization and lack of coordination. Psychological distress related with the lack of IT training was also identified in a group of 33 psychotherapists in New Zealand studied by Werkmeister and colleagues (2023).

Along these lines, studying a company transitioning from on-site to remote work in China, Wang and colleagues (2023) found that organizational support, in the form of family-supportive supervisor behaviours (FSSB), mitigated the feeling of isolation and negative emotional experiences resulting from the absence of socialization events. The reason is that FSSB, such as showing understanding and empathy with employees about work-family demands, or adjusting schedules to allow employees to manage family responsibilities makes them feel cared and integrated. This is also shown by an Italian study on 695 employees of an environmental protection agency that found a positive link between supervisor support and well-being (Giacomelli et al., 2023). In another study, doctors reported that the lack of clear hierarchical communication led to increased anxiety because it made

it impossible to follow the directives useful for carrying out clinical tasks (Werkmeister et al., 2023). Destabilization can also affect workers differently depending on their individual conditions. For example, Tomczak et al. (2022) highlight the importance of guidance during the transition from office to home for individuals with autism, who may face greater challenges in adapting to new modes of communication. They may feel overwhelmed and struggle with effective interactions. In such cases, supervisors play a critical role in supporting these employees, particularly by helping them navigate and manage online interactions.

Overall, these studies point to a gap in preparedness and coordination, underlining the need for both individual and organizational training to support through the structural transformations introduced by remote work.

3.2.2 Bridging

The second mechanism we identified is called '*bridging*.' Remote work has expanded opportunities for interpersonal connection by increasing the number and diversity of digital interactions. What a different set of articles highlights is that the increased number of online meetings and the emergence of new online communication habits, via platforms such as Zoom (Werkmeister et al., 2023), WhatsApp (Beigi et al., 2023) or WeChat (Wang et al., 2023) allow employees to engage with colleagues who would have been difficult to reach through in-person work (Brooks et al., 2022). Colleagues based in different branches or geographical locations became suddenly reachable thanks to remote working, according to Beigi et al. (2024), helping creating of broader and more heterogeneous social networks which offer new access points to social support.

Empirical studies support this mechanism across various professional settings. In Canada, Parent-Lamache and Saade (2024) found that working remotely helped workers reduce the stress caused by communication gaps and aided new employees in better understanding their organizational structure. Similarly, Brooks et al. (2022) show that diplomatic staff used virtual tools to connect with previously unreachable colleagues, fostering a greater sense of community. Colaço et al. (2024), studying residents in the Lisbon area, report that workers actively use digital channels to seek support from colleagues and supervisors, compensating for reduced in-person contact. Rohwer et al. (2024) also highlight the use of technology by German employees and managers as a vital resource to maintain effective

communication during the shift to remote work. Online tools not only maintain work-related support but also facilitate the exchange of emotional and professional resources. For example, Werkmeister et al. (2023) describe how mental health professionals in New Zealand use videoconference tools, such as Zoom to share advice and resources, while Roman et al. (2023) document their use for formal peer counseling among sign language interpreters in the US and UK.

Beyond the workplace, remote communication technologies also extend social support networks into the personal domain. Beigi et al. (2024), in a multinational study of dual-earner couples, found that digital tools helped maintain ties with geographically distant friends and extended family members. Indeed, joining WhatsApp group chat or playing online multiplayer games allowed to invest in relationship that go beyond the direct family ties. Similarly, in a sample of Australian workers, remote work also allowed for the maintenance of social relationships that were initially developed through face-to-face interactions, particularly in the context of abrupt working condition shifts due to the COVID crisis or distributed work locations (Graham et al., 2023).

Overall, telework can facilitate a form of digital “bridging” that broadens social horizons and helps sustain or even enhance access to social support, despite the decline in face-to-face contact.

3.2.3 Ambivalence

Ambivalence stems from the paradox that social support can simultaneously create new pressures and surveillance dynamics (Fiorini, 2023). What characterizes such process is that, in a context in which trust is lacking, greater presence and frequent communication from the management can lead to negative consequences.

For example, in their qualitative study of diplomatic staff, Brooks et al. (2022) found that workers appreciated being able to make personal phone calls without feeling constantly monitored. However, this autonomy is fragile and highly dependent on trust with bosses and hierarchies. In contexts where trust is lacking, the same flexibility can be experienced as a form of control over worker’s activity. In two studies, both among German software professionals (Müller et al., 2023) and British translators (Roman et al., 2023), workers reported that trust from management was

essential to avoid feeling excessively controlled. Similarly, in a study on Maltese IT professionals, Fiorini (2023) described a sense of working under constant scrutiny, likening their experience to a “Big Brother” and mistrusted environment. Increased digital accessibility also heightens the expectation to be constantly available. The tools that enable communication across space and time can generate pressure to respond quickly and remain online, making it difficult to disconnect. Wang et al. (2023), in a study of Chinese employees, showed that heightened connectivity raised superiors' and colleagues' expectations of immediate responsiveness, leading to excessive demands, extended working hours, and ultimately, emotional exhaustion.

This ambivalence—between support and autonomy on the one hand, control and pressure on the other—illustrates the double-edged nature of telework, digital connectedness and its impact on well-being.

3.2.4 Dormancy

The fourth mechanism refers to *dormancy* (Marin & Hampton, 2019). This concept refers to reduced face-to-face interaction in teleworking conditions, and how this can hinder the exchange of resources, including social support. The shift to remote working limits opportunities to meet and maintain social ties, causing some ties to become “dormant”. Although, as previously mentioned, communication tools can help maintain extended functional contact, many remote workers find them insufficient to satisfy deeper relational needs such as trust, cohesion and interpersonal bonding in the workplace (Rohwer et al., 2024; Jaiswal & Arun, 2024).

For example, in two studies, Indian managers (Jaiswal and Arun, 2024) and Chinese workers (Wang et al., 2023) reported that the absence of in-person social contact disrupted their emotional quality of work relationships and reduces the flow of social support (Wang et al., 2023). In the United States, Badura and colleagues (2023) reported that workers with autism reported a decrease in social support while working from home due to no longer meeting colleagues in person, which negatively affected their job satisfaction. This also reported in Tomczak and colleagues (2022): eight respondents with autism spectrum disorder emphasized

that reduced interaction not only heightened feelings of disconnection but also limited opportunities for personal growth².

At the same time, fewer face-to-face social interactions may protect some individuals from negative dynamics in the workplace. Studies from Malta, Norway and Canada suggest that teleworking can reduce exposure to bullying, harassment or disruptive interruptions, thus improving mental well-being (Fiorini, 2023; Bollestad et al., 2022; Parent-Lamache & Saade, 2024). The study of Bollestad and colleagues (2022) also examined the mediating role of workplace bullying. Results showed that bullying partially mediated the relationship between remote work, loneliness, and work engagement. Specifically, bullying was found to suppress the positive effect of remote work on reducing loneliness and to enhance its positive association with work engagement. This suggests that for individuals who experience bullying, remote work may offer a protective buffer—reducing social exposure to negative interactions and providing a more focused and engaging work environment. Interestingly, for individuals with already low levels of social support, isolation was sometimes experienced as beneficial. In such cases, distancing from social environments helped alleviate psychological distress by removing daily reminders of exclusion, such as witnessing social interactions from which they felt left out (Bollestad et al., 2022).

Overall, these studies suggest that face-to-face interaction remains irreplaceable. *Dormancy* can reduce both supportive and conflictive interactions, with different implications for well-being.

3.2.5 *Transfer*

Transfer captures a core transformation induced by telework: the shift in the primary site of social interaction from the workplace to the home. As professional life moves into the domestic sphere, so too do the relational dynamics that once belonged to the office. Everyday exchanges, both supportive or conflictual, are no longer mediated by colleagues but increasingly by household members. In this sense, telework triggers a redistribution of social exchanges into the private realm,

² However, as Tomczak et al., 2022 reported, being away from the work place can also allow people with specific autistic traits to avoid uncomfortable and stressful conversation. For six participants, hybrid work emerges as a good trade off to avoid challenging interactions while keeping sufficient contacts.

reshaping who provides support, where tensions emerge, and how social ties are maintained. This reallocation may even counterbalance dormancy effect, that is revitalizing relational activity in a new, household-centered context.

On one hand, although telework may reduce workplace interruptions, it can increase distractions from household members (Brooks et al., 2022). In a study of Lisbon residents, Colaço et al. (2024) reported that some participants—especially women—faced greater challenges managing family responsibilities due to extended working hours and increased demands arising from expectations of constant availability. As a result, teleworkers often face competing demands from both the home and the workplace. Having adequate space, a dedicated workroom, and proper equipment can help mitigate distractions (Singh et al., 2024). It is also mentioned in the study of Werkmeister et al., (2023) of clinicians from New Zealand, who reported that not having a dedicated room could increase interruptions from other household members. Likewise, improvements in work–life balance depend on workers' preparedness and willingness to telework, as shown in a Finnish sample (Kaltiainen & Hakanen, 2024). Many of the negative consequences associated with telework were observed during the COVID-19 pandemic, when the shift to remote work was abrupt and unplanned (e.g., Chambel et al., 2023; Colaço et al., 2024; Daneshfar et al., 2023). In these cases, workers often lacked the conditions necessary to make teleworking effective (Rohwer et al., 2024; Roman et al., 2023).

On the other hand, telework can foster family bonding and improve well-being by allowing workers to spend more time with loved ones. A multi-country study of dual-earner households found that time saved from commuting was often reallocated to family interactions. In the same study, parents confessed that working from home allowed to turn work breaks into family time. Together it potentially enables strengthening social bonds (Beigi et al., 2024). Similarly, Brooks et al. (2022), in a qualitative study of British civil servants, observed that telework allowed employees to take breaks with family members, reinforcing emotional connections. The result is a dual impact on well-being. While stronger family ties and more time with loved ones can enhance life satisfaction, the erosion of boundaries and the blending of roles can lead to stress and poorer health outcomes. For example, Maltese IT workers reported that blurred work–life boundaries contributed to a decline in well-being (Fiorini, 2023). Additionally, leadership styles play a critical role: family-supportive leadership behaviors can reduce role conflict and

enhance well-being. Wang et al. (2023) found that such leadership reduced negative emotions and workplace isolation among home-based workers in China.

4. Discussion and recommendations

This systematic review addressed key issues related to remote work, social support and workers' well-being. By analyzing 32 high-quality studies, we provide a nuanced understanding of the mechanisms that link these dimensions. Overall, approximately 60% of the studies identified a significant effects of remote work activities on changes in social support or well-being. However, findings are sharply divided: while 51% of the quantitative studies reported positive outcomes, 49% highlighted negative effects such as stress or emotional fatigue. To navigate these mixed results, we conducted a Qualitative Content Analysis, which allowed us to identify five key mechanisms —destabilization, bridging, ambivalence, dormancy, and transfer. These mechanisms (i.e., underlying logics linking these factors) reveal the complex nature of remote work and show how it generates both opportunities and risks. Understanding and managing these dynamics—both in organizational practices and in domestic life—is crucial to harness the full potential of remote work and improve workers' quality of life.

The first mechanism, *destabilization*, highlights how an abrupt and unstructured shift to remote work can disrupt daily routines and weaken organizational structures. During the COVID-19 pandemic, many workers experienced uncertainty around their tasks, schedules, and communication channels—leading to psychological distress and a perceived lack of support. Beyond these exceptional circumstances, this experience teaches us that remote work cannot be treated as a mere logistical adjustment. It requires thoughtful preparation, clear leadership, adequate equipment, and shared guidelines. Supportive supervisors, in particular, play a crucial role in mitigating destabilizing effects by reintroducing structure and fostering a sense of trust and stability. The recommendation here is twofold: workers should not assume remote work is inherently easier, and should actively seek clarity and support from their supervisors; meanwhile, organizations must take full responsibility for implementing remote work in a strategic and sustainable way.

The second mechanism, *bridging*, points to the often-overlooked benefits of remote work—namely, its potential to expand workers' networks. Digital tools allow employees to form new ties beyond physical boundaries, especially in large or

geographically dispersed organizations. These “bridging ties” can provide both instrumental and emotional resources. However, this potential is not automatic: it depends on thoughtful communication design and inclusive organizational cultures. The recommendation is to treat these digital opportunities as starting points for relationship-building. While online contact is useful, it needs to be nurtured through occasional face-to-face interactions—such as annual retreats or hybrid “anchor events”—to deepen and sustain relational structures.

The third mechanism, *ambivalence*, reveals one paradox of digital support: the same tools that enable connection can also generate surveillance and stress. In low-trust environments, frequent online check-ins or messages may be perceived as monitoring rather than support. This tension reflects a broader ambiguity in remote work: the autonomy it promises can easily become pressure to be always available, and demanding hierarchies. Organizations must therefore foster a culture of trust and be mindful of how digital presence is interpreted by employees. For example, running periodic surveys on workers’ relationships can be a useful tool to monitor these processes, helping managers remain aware of emerging tensions or needs. In addition, clear rules should be established regarding how and when supervisors are allowed to contact employees—outside of agreed working hours, contact should be limited. Such boundaries are essential to protect workers’ time, reduce stress, and reinforce the notion that remote work still requires structure and respect for work-life balance. Face-to-face interactions, even occasional, can help prevent misunderstandings and rebalance relational dynamics.

Dormancy, the fourth mechanism, refers to the weakening of informal and spontaneous social interactions in remote contexts. While digital platforms can sustain task-oriented contact, they often fall short of meeting emotional and relational needs. Some workers may experience this as a decline in perceived support; others may benefit from reduced exposure to workplace conflict or exclusion. This dual effect suggests that organizations must actively foster meaningful connections—not just through formal meetings, but also via informal and relationally rich moments that mimic the spontaneity of office life. Finally, the *transfer* mechanism captures how the relational dynamics of work increasingly shift into the domestic sphere. As professional life moves into the home, family members often become the main providers of emotional and practical support. While this can strengthen family bonds for some, it may also cause overload and stress, especially in households with limited space or unequal divisions of labor. Leadership that recognizes

these pressures and enables genuine flexibility is essential for mitigating the challenges of this shift.

We must take into account that this systematic review has a set of limitations. Most included studies were conducted during the COVID-19 pandemic, a context that may not fully reflect more stable, long-term remote work conditions. The methodological heterogeneity and wide variety of well-being indicators also made a meta-analysis unfeasible and the quantitative overview provided rather descriptive. Including qualitative studies enhanced interpretative depth but limited comparability. Future research should therefore revisit these mechanisms in post-pandemic contexts and test them across different occupational sectors and social groups.

Despite these limitations, taken together, the five mechanisms we identified offer a nuanced and empirically grounded lens to understand how remote work is reshaping working life. Organizations should avoid both celebratory and alarmist narratives. Instead, they should focus on promoting environments where social support is seen as a vital process not only to individual health, but also for that of institutions and organizations as a whole. Strengthening this process in remote settings requires investment in leadership, communication practices, and infrastructure that fosters both connection and autonomy. Future research should explore how these mechanisms vary across social groups, particularly with respect to gender, caregiving responsibilities, and socio-economic inequalities. This would further help to understand the transformations remote work is bringing and build workplaces that are both supportive and healthy.

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Appendix

Table A: Overview of the main findings of the studies

Authors	Aim and objective	Country	Main findings
Andersone et al. (2022)	Explores first-line managers' perceptions during the shift to distance management in the pandemic's first year.	Denmark	Managers faced challenges in establishing routines during COVID-19 due to frequent lockdown changes, lack of organizational support, and difficulties in coordinating teams remotely without face-to-face interaction.
Appel-Meulenbroek et al. (2023)	Investigates health's mediating role between environmental factors and productivity during full-time WFH, covering physical, mental, and social health.	Netherland	Social support positively impacts mental health during remote work, highlighting the importance of interpersonal interaction to reduce loneliness, especially in hybrid models.
Badura et al. (2023)	Examines the impact of WFH on employees with disabilities, their job satisfaction, and leader exchange quality.	USA	Employees with disabilities experienced lower job satisfaction from reduced support during remote work, despite telework potential to improve labor market accessibility by eliminating commutes.

Beigi et al. (2024)	Studies how professional dual-earner couples with children adjusted to COVID-19 lockdown challenges.	China, Iran, Malaysia, the United Kingdom, and USA	Remote work was linked to increased loneliness and work engagement but decreased bullying, with bullying being positively correlated with loneliness and negatively with engagement.
Bollestad et al. (2022)	Explores the influence of telework on bullying.	Norway	Remote work was positively related to loneliness and work engagement but negatively related to bullying. Further, bullying was positively related to loneliness and negatively related to work engagement.
Brooks et al. (2022)	Analysis of remote work's advantages, challenges, and worker experiences.	Worldwide	Remote work offers privacy, flexibility for personal calls, and opportunities for introverts to thrive in virtual interactions, while also building stronger family connections. However, it can reduce the workplace community and hinder relationship-building for new employees due to a lack of in-person events.
Chambel et al. (2023)	Investigates the role of Family Supportive Supervisor Behaviour in	Portugal	The intensity of telework itself did not have significant effects on well-being The interaction between intensity of telework and relational phenomena is

balancing work-family dynamics during telework.

positive and significant for exhaustion and work engagement with work-family enrichment. Intensity of telework does not moderate the effect of family-supportive supervisor support. FSSB had a positive effect on work-life enrichment, reduced work-life conflict, increased engagement and had a weakly significant reduction on exhaustion. The intensity of telework itself did not have significant effects on well-being

Chen et al. (2023) Examines WFH's association with work-related outcomes and modifying factors in frequent teleworkers.

USA

The paper finds that full-time telework has a positive impact on job satisfaction, while part-time telework doesn't make any difference with full-time in person work. Effects on work-family conflict are also insignificant, and the paper does not find any significant relational mediator.

Colaço et al. (2024) Analyses how COVID-19 changed perceptions of commuting and preferences for telecommuting versus face-to-face work

Portugal

The paper shows that telework is perceived as generally positive by Lisbon teleworkers, regardless of the stage of the pandemic. However, social isolation and lack of contact were amplified during the peak stages of the pandemic.

Daneshfar et al. (2023)	Develops a conceptual model on factors influencing WFH effectiveness and public sentiment during the pandemic.	Worldwide	The transition to WFH during COVID-19 disrupted social connections, which are critical for well-being. Social distancing, lack of support, and limited interactions with colleagues emerged as key challenges.
Fiorini (2023)	Studies the impact of remote work on employee health and contributing factors.	Malta	Telework reduces interactions with colleagues, fostering isolation and loneliness, but it can also help avoid negative relationships and improve health for some individuals. The varied impact depends on individual coping abilities and preferences.
Giacomelli et al. (2023)	Analyzes telework conditions' effect on job satisfaction in public organizations, emphasizing supervisory support and job autonomy.	Italy	Favourable telework conditions positively influence well-being and job satisfaction through enhanced supervisory support. Clear direction, feedback, and motivation are essential to optimize employee outcomes in remote work settings.
Golden (2006)	Examines relationships' mediating role in telecommuting and job satisfaction	USA	Job satisfaction follows a reversed U-shape with telework intensity, peaking in hybrid arrangements. Too little or too much telework, as well as imbalanced supervisor and colleague support, negatively impact satisfaction and work relationships.

Graham et al. (2023)	Investigates workplace community, social support, and health during COVID-19.	Australia	A stronger sense of community and social support at work improves self-rated health. Social support fluctuates over time, with distinct patterns of stability, increase, or decrease. The transition back to the office did not affect social support.
Jaiswal & Arun (2024)	Explores the effects of WFH on employees during lockdowns.	India	Lack of supervision during WFH left employees feeling unnoticed, demotivated, and disengaged. This also led to reduced vigor, commitment, and a sense of belonging, as virtual meetings failed to replicate face-to-face trust and bonding.
Kaltainen & Hakanen (2024)	Evaluates mandatory teleworking's impact on well-being.	Finland	Mandatory telework during COVID-19 led to reduced social support, decreasing engagement while increasing burnout and boredom. Chosen telework, however, provided more flexibility and resources, mitigating these negative effects.

Ki & Lee (2024)	Studies crisis-induced telework effect on job satisfaction and retention in the public sector.	USA	Increased telework during the COVID-19 peak improved job satisfaction but returning to the office afterward led to declines in satisfaction. Social support did not offset the negative effects of transitioning back to in-office work.
Klebe & Felfe (2023)	Examines Health-Oriented Leadership's varying effects on remote versus on-site work.	Germany	Social support is more strongly associated with work engagement and satisfaction in on-site work than in remote work, likely due to the benefits of face-to-face interactions.
Kröner & Müller (2023)	Investigates the long-term impact of telework on mental well-being post-pandemic onset.	Germany	No significant interaction between telework and social support was found, which might be attributed to the unique circumstances of the pandemic.
Lopes et al. (2024)	Links family support and subjective well-being, with work engagement as a mediator.	Portugal	For teleworkers, social support indirectly impacts well-being, while for on-site workers, only POFS (Perceived Organizational Family Support) significantly enhances subjective well-being and life satisfaction.

Müller et al. (2023)	Focuses on challenges faced by software professionals transitioning to WFH during COVID-19.	Germany	Missing personal contact negatively impacts job satisfaction and can lead to depressive moods, though experienced remote workers report this less frequently.
Oakman et al. (2023)	Analyzes the relationship between WFH patterns, musculoskeletal pain, and stress in older workers.	Australia	Telework intensity increases stress by diminishing the sense of community and positive team atmosphere. This lack of connection leads to higher stress levels for teleworkers due to reduced interpersonal interactions.
Parent-Lamarche & Saade (2024)	Studies teleworking's effects on interpersonal conflict, emotional intelligence, and psychological well-being.	Canada	Teleworking was indirectly positively linked to psychological well-being by reducing interpersonal conflict.
Rohwer et al. (2024)	Examines job demands, resources, leadership, and coping in employees new to WFH.	Germany	Online communication is less effective than face-to-face interactions, fostering worse work dynamics and increasing loneliness. Lack of supervisor support can add stress, and high workloads may increase work-family conflict.

Roman et al. (2023)	Summarizes remote work experiences of sign language interpreters and administrators.	USA, England	Organizational support for equipment provision, was viewed positively, allowing employees to prioritize self-care and family. Increased stress was due to unclear responsibilities and no general improvement in work-life balance
Scales et al. (2021)	Identifies burnout contributors in the US public health workforce during COVID-19.	USA	Workers preferred in-person work for a stronger sense of community, though organizational support, especially for equipment provision, was still appreciated.
Singh et al. (2024)	Explores UK clinical psychologists' experiences working remotely during the pandemic.	UK	The negative impact of telework on both physical and psychological health was significant, especially due to social isolation and loss of coworker interaction.
Tomczak et al. (2022)	Proposes assessment frameworks for digital adaptation needs in employees with autism.	Poland	Teleworking reduces social overload but also limits access to social support and desired contact, with individual experiences varying. Access to supervisors for feedback becomes more difficult.

Wang et al. (2023)	Investigates how home-based telework impacts work engagement.	China	WFH negatively impacts work engagement due to increased negative emotions from isolation and challenges in online communication dynamics, though family-supportive leadership can help alleviate these effects.
Werkmeister et al. (2023)	Analyses mental health clinicians' experiences during the first lockdown.	New Zealand	Lockdown and telework led to lower job satisfaction, largely due to relational impacts like reduced organizational support and social isolation.
Yu et al. (2022)	Links WFH conditions, social distancing experiences, and depressive symptoms.	China (Hong Kong)	Intensive teleworking (8 days in 2 weeks) is positively correlated with depressive moods. Moderate teleworking (3-7 days) mitigates negative health outcomes and social isolation.
Zheng et al. (2023)	Studies supervisor-subordinate trust and monitoring dynamics in WFH settings.	UK	Teleworkers who felt more monitored during telework experienced lower trust, leading to increased exhaustion and reduced vigour over time. Supervisor monitoring negatively affected well-being, with its impact on trust being more pronounced at the baseline, before employees adapted to the new work arrangements.

Table B. Summary of quantitative studies: direction and significance

Authors	Relations studied	Direction	Significance
Appel-Meulenbroek et al. (2023)	Support > Isolation	—	*
	Isolation > Exhaustion	+	*
	Isolation > Depression	+	***
Badura et al. (2023)	Remote work > Support	—	**
	Reduced help > Job satisfaction	—	***
	Diminished help X Support > Job satisfaction		Non-significant
Bollestad et al. (2022)	Remote work > Work engagement	+	**
	Remote work > Loneliness	+	***
	Remote work > Bullying	—	***
	Bullying > Loneliness	+	***
	Bullying > Work engagement	—	***
	Remote work > bullying > Loneliness	—	***
	Remote work > bullying > Work engagement	+	***
Chambel et al. (2023)	Family Supportive Supervisor Behaviour (FSSB) > Work-family conflict	—	***

Chen et al. (2023)	Work-family conflict > Exhaustion	+	***
	Work-family conflict > Work engagement	—	***
	Telework intensity > Work-life conflict		Non-significant
	Telework intensity > Work-life enrichment		Non-significant
	Telework intensity > Exhaustion		Non-significant
	Telework intensity > Work engagement		Non-significant
	FSSB X Telework intensity > Work-life conflict	—	***
	FSSB X Telework intensity > Work-life enrichment	+	***
	FSSB X Telework intensity > Exhaustion		Non-significant
	FSSB X Telework intensity > Work engagement	+	***
	Work from home (1 to 4 days) > Distraction	—	**
	Work from home (5 days a week) > Distraction	—	**
	Work from home (1 to 4 days) > Job satisfaction		Non-significant
	Work from home (5 days a week) > job satisfaction		Non-significant
	Work from home (1 to 4 days) X co-worker support > Distraction		Non-significant
	Work from home (5 days) X co-worker support > Distraction		Non-significant
	Work from home (1 to 4 days) X co-worker support > Job satisfaction		Non-significant

	Work from home (5 days) X co-worker support > Job satisfaction		Non-significant
Giacomelli et al. (2023)	Organizational support > Job satisfaction	+	***
	Organizational support > Supervisor support	+	***
	Supervisory support > Job satisfaction	+	***
	Organizational support > Supervisor support > Job satisfaction		Non-significant
Golden (2006)	Telework intensity > Job satisfaction	+	**
	Telework intensity squared > Job satisfaction	—	***
	Telework intensity > Supervisor Support	+	***
	Telework intensity squared > Supervisor Support	—	***
	Telework intensity > Relationship quality with colleagues	—	***
	Telework intensity squared > Relationship quality with colleagues		Non-significant
	Supervisor support > Job satisfaction	+	***
	Relationship quality with colleagues > Job satisfaction	—	***
	Supervisor support squared > Job satisfaction	—	***
	Relationship quality with colleagues squared > Job satisfaction	—	***
Graham et al. (2023)	Return-to-work trajectories (increase, stable, decrease) > social support		Non-significant
Kaltiainen & Hakanen (2024)	Increase in telework > Loss of support	+	***

	Loss of support > Burnout	+	***
	Loss of support > Work engagement	—	***
	Loss of support > Boredom	+	***
	Increase in telework > Loss of support > Work engagement	—	***
	Increase in telework > Loss of support > Burnout	—	***
	Increase in telework > Loss of support > Boredom	+	***
Ki & Lee (2024)	Increase in TW X Organizational support > Job satisfaction	+	***
	Increase in TW X Organizational support > Job satisfaction		Non-significant
	Decrease in TW X Organizational support > Job satisfaction		Non-significant
Klebe & Felfe (2023)	On site (ref. online) > Social support		Non-significant
	On-site X high support > Mental exhaustion		Non-significant
	On-site X high support > Job satisfaction	+	**
	On-site X high support > Work engagement	+	**
Kröner & Müller (2023)	Telework X support > Low well-being		Non-significant
	Telework X support > Medium well-being		Non-significant
Lopes et al. (2024)	Teleworkers: Perceived organisational family support (POFS) > Work en-		
	gagement > Subjective well-being	+	***

	Teleworkers: POFS > Work engagement > Life satisfaction	+	***
	Teleworkers: Perceived supervisor family support (PSFS) >. Work engagement > Subjective well-being	+	***
	Teleworkers: PSFS > Work engagement > Life satisfaction	+	**
	On-site: POFS > Work engagement > Subjective well-being	+	**
	On-site: POFS > Work engagement > Life satisfaction	+	**
	On-site: PSFS > Work engagement > Subjective well-being		Non-significant
	On-site: PSFS > Work engagement > life satisfaction		Non-significant
	Oakman et al. (2023)		
	Actual days teleworking > Sense of community > Stress	+	**
Parent-Lamarche & Saade (2024)	Actual days teleworking > Sense of community		Non-significant
	Sense of community > Stress		Non-significant
	Telework > Interpersonal conflict	—	***
	Telework > Psychological well-being		Non-significant
	Interpersonal conflict > Psychological well being	—	***
Wang et al. (2023)	Telework > Interpersonal conflict > Well being	+	***
	WFH > Workplace isolation > Negative emotion	+	**
	WFH > Telepressure > Negative emotion	+	**

	WFH > Negative emotion	+	**
	WFH > Workplace isolation > Negative emotion > Work engagement	—	**
	WFH > Telepressure > Negative emotion > Work engagement	—	**
	WFH > Workplace isolation > Work engagement	—	**
	WFH > Telepressure > Work engagement	—	**
	WFH > Work engagement	+	**
Yu et al. (2022)	WFH 3-7 days > Depressive symptoms	+	Non-significant
	WFH > 7 days > Depressive symptoms	+	**
	WFH 3-7 days X Isolation > Depressive symptoms		Non-significant
	WFH > 7 days X Isolation > Depressive symptoms	+	***
	WFH 3-7 days X Experience of social distancing > Depressive symptoms		Non-significant
	WFH > 7 days X Experience of social distancing > Depressive symptoms		Non-significant
	WFH > 3-7 days X Higher quality in family relations > Depressive symptoms	—	***
	WFH > 7 days X Higher quality in family relations > Depressive symptoms		Non-significant

*Coefficients present in the quantitative papers analyzed. Relations are noted by ">". *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$*