British Journal of Industrial Relations

WILEY

BJIR An International Journal of Employment Relations LSE

SPECIAL ISSUE ARTICLE OPEN ACCESS

Who Benefits From Right-to-Disconnect Legislation in Europe? Cross-National and Gendered Effects on Employee Wellbeing

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Received: 11 April 2025 | **Revised:** 29 December 2025 | **Accepted:** 12 January 2026

Keywords: employee wellbeing | evaluation | gender | labour law | right-to-disconnect | telework

ABSTRACT

The effectiveness of labour regulation depends not only on the formal articulation of rights, but on the institutional arrangements through which those rights are enforced and distributed across workers. This is particularly salient for regulations governing working time and employee availability, where outcomes are shaped by power relations in the workplace and persistent gendered divisions of paid and unpaid labour. The introduction of right-to-disconnect (R2D) legislation in several European countries provides a valuable opportunity to examine how procedural labour rights operate across different industrial relations systems and how they generate gender-differentiated outcomes. Rather than constituting a single policy model, R2D provisions vary substantially in their reliance on collective bargaining, firm-level discretion and individual characteristics. Using data from the European Social Survey between 2010 and 2022 and exploiting the staggered introduction of R2D policies in France, Belgium, Spain, Ireland and Portugal, this study estimates effects on subjective wellbeing among employees in teleworkable occupations. Applying a dynamic difference-in-differences approach, the analysis identifies modest average improvements in wellbeing in countries where R2D provisions are embedded within stronger industrial relations systems. Gendered analyses show that these benefits accrue more consistently to men than to women, highlighting how digital labour regulation may interact with unequal distributions of paid and unpaid work.

1 | Introduction

The proliferation of digital technologies in recent decades has contributed to an expansion of location-independent work, commonly referred to as telework (Chesley 2014). While telework has created new production opportunities for firms by fostering an 'always-on' workforce operating beyond traditional temporal boundaries, it has also afforded employees greater flexibility over when and where work is performed. Yet, a growing body of evidence shows that these arrangements frequently intensify paid and unpaid work demands, with detrimental consequences for employee wellbeing (Chesley 2014; Kelly et al. 2014; Chung and van der Lippe 2020; Kelly and Moen 2020; Chung 2022). By blurring the boundaries between professional and domestic life, telework increases workers' exposure to extended working hours, persistent digital availability and competing demands across life domains, particularly in contexts where organizational norms reward timely responsiveness and constant connectivity (Chung 2023).

These pressures are not evenly distributed. Research consistently shows that women are especially susceptible to work intensification associated with telework, as persistent gender norms around caregiving and domestic labour intersect with

heightened expectations of availability at work (Schieman and Glavin 2008; Glavin and Schieman 2012; Mazmanian et al. 2013; Allen et al. 2014; Chen and Karahanna 2018; Chung 2020). The resulting 'always available' state erodes the quality of rest time and increases risks of stress, fatigue and burnout, with longer-term implications for physical and mental health (Dembe et al. 2005; Schaufeli et al. 2009; Barley et al. 2011; Derks and Bakker 2014; Windeler et al. 2017; Barber and Santuzzi 2015; Chandola et al. 2019).

Against this backdrop, several European governments have introduced right-to-disconnect (R2D) legislation aimed at protecting employees' rest time by recognizing their right to disengage from work-related digital communications outside of working hours. France pioneered this intervention in 2017, followed by Belgium and Spain in 2018–2019 and Ireland and Portugal in 2021. Despite growing policy interest and ongoing debate at the European Union level, empirical evidence on the effects of R2D legislation remains limited. In principle, such policies should improve wellbeing by enhancing workers' autonomy and limiting excessive job demands associated with digital overconnectivity. However, from an industrial relations perspective, the effectiveness of these rights is unlikely to be uniform.

Two strands of theory point to contrasting expectations. From the job demands–control–support model, R2D legislation may alleviate strain by increasing workers' control over temporal boundaries and reducing psychosocial demands linked to constant availability (Karasek 1979; Rugulies 2023). In contrast, industrial relations scholarship emphasizes that the impact of labour regulation depends on the institutional contexts in which rights are embedded and enforced. Procedural rights such as the R2D may operate as 'beneficial constraints' only where collective bargaining, employee representation and enforcement mechanisms enable workers to exercise them in practice (Streeck 1997). Where such institutions are weak, R2D provisions may remain symbolic, offering limited protection against work intensification.

These perspectives suggest that the wellbeing effects of R2D legislation are likely to vary systematically across countries with different industrial relations systems and across social groups. In particular, gendered divisions of paid and unpaid labour may shape whether reductions in digital work translate into genuine improvements in wellbeing or are offset by increased domestic demands. Understanding whether, for whom and under what conditions R2D legislation improves wellbeing, therefore, requires attention to institutional variation and gendered mechanisms.

In this article, I examine the impact of national R2D legislation on employee wellbeing across Europe, focusing on cross-country and gendered differences. Using data from the European Social Survey between 2010 and 2022, I estimate the effects of R2D legislation on life satisfaction, happiness and self-rated health among employees in teleworkable occupations. Exploiting the staggered introduction of R2D legislation, I apply a doubly robust difference-in-differences approach that allows treatment effects to vary across countries and over time (Callaway and Sant'Anna 2021). I also examine changes in total working time as a potential mechanism linking R2D legislation to wellbeing outcomes.

By integrating occupational health theory with an industrial relations perspective, this study contributes to debates on digital labour regulation by demonstrating that the effects of the R2D legislation are highly context-dependent. The findings show that formal rights alone are insufficient to guarantee improved wellbeing, and that institutional arrangements as well as gendered work patterns play a critical role in shaping policy outcomes.

2 | Background and Theoretical Framework

2.1 | Telework, Digital Connectivity and Work Intensification

Telework has become an increasingly prominent feature of contemporary labour markets, particularly in knowledge-intensive occupations where work tasks can be performed using information and communication technologies. Defined as an arrangement in which employees work away from a designated worksite while remaining digitally connected to their employer, telework varies in frequency, formality and intensity, ranging from occasional remote work to fully home-based arrangements (Eurofound 2020, 2022a). Although telework is often promoted as a means of enhancing flexibility and work–life balance, empirical research consistently demonstrates that it is closely associated with work intensification.

Work intensification manifests through longer working hours, increased unpaid overtime, irregular schedules, and heightened cognitive and emotional demands (Green 2005; Kelly and Moen 2020). Teleworkers are more likely than on-site workers to extend their working day into evenings and weekends and to remain psychologically engaged with work during leisure time (Felstead and Henseke 2017; Chung 2022). These patterns are reinforced by organizational cultures that valorize responsiveness, availability and performance measured through output rather than time spent working (Lott and Chung 2016; Kelly and Moen 2020). As digital technologies enable constant connectivity, the temporal boundaries that historically structured working time become increasingly porous, shifting responsibility for managing availability from organizations to individual workers.

From a wellbeing perspective, persistent digital overconnectivity poses particular risks. Monitoring work-related communications outside of contracted hours undermines the quality of rest time and limits opportunities for psychological recovery, contributing to stress, fatigue and burnout (Santuzzi and Barber 2018; Hu et al. 2019; Becker et al. 2018). Prolonged exposure to these conditions has been linked to adverse physical and mental health outcomes, including sleep disturbance, emotional exhaustion, and increased risk of injury and illness (Dembe et al. 2005; Schaufeli et al. 2009; Chandola et al. 2019). These findings underscore the need for regulatory interventions that address the temporal organization of digitally mediated work.

2.2 | Gender, Telework and the Allocation of Total Work Time

The consequences of telework and digital connectivity are deeply gendered. A substantial body of research shows that women,

particularly those with caregiving responsibilities, are more likely to experience intensified total workloads when teleworking, as paid work becomes intertwined with unpaid domestic labour (Schieman and Glavin 2008; Glavin and Schieman 2012; Chung 2020). While telework may offer women greater flexibility to manage competing demands, it often does so by facilitating the simultaneous performance of paid and unpaid work rather than reducing overall labour demands (Mazmanian et al. 2013; Allen et al. 2014).

Empirical studies demonstrate that teleworking women perform more housework and childcare than both teleworking men and women working on-site, particularly in countries where traditional gender norms persist (de Laat 2025; Hilbrecht et al. 2008; Kim 2020; Kurowska 2020; Chung and Booker 2023). Women are also more likely to multitask and experience frequent interruptions when working from home, further intensifying cognitive and emotional demands (Andrew et al. 2020). As a result, interventions that reduce paid working time or digital availability may not necessarily translate into improved wellbeing for women if unpaid work expands in parallel.

These dynamics underscore that analyses of telework-related policies must move beyond paid working hours alone and consider total working time, encompassing both paid and unpaid labour. Gendered divisions of labour within households shape how regulatory interventions are experienced and whether they produce meaningful improvements in wellbeing.

2.3 | R2D Policies and Competing Theoretical Expectations

The R2D has emerged as a policy response to the intensification of digitally mediated work and the erosion of employees' rest time. While the European Union does not yet explicitly regulate the R2D as a standalone right, several member states have introduced national provisions since 2017, drawing on existing working time, occupational health and safety, and digital rights frameworks. Although these policies share a common objective—to protect employees' right to disengage from work-related digital communications outside of working hours—their legal form, timing and modes of implementation vary considerably across countries.

France was the first country to introduce a formal R2D law in 2017, embedding it within collective bargaining procedures that require firms to negotiate R2D arrangements with employee representatives. Belgium and Spain followed in 2019, adopting approaches that also emphasize firm-level implementation, though with different degrees of legal obligation and collective involvement. More recently, Ireland and Portugal introduced R2D measures in 2021, relying respectively on a non-binding code of practice and a more prescriptive statutory duty on employers. These differences reflect broader variation in national industrial relations systems and shape the extent to which R2D provisions are enforceable in practice (refer to Table 1 for a detailed overview of R2D policies).

From an occupational health perspective, R2D policies align closely with the job demands–control–support model (Karasek 1979; Rugulies 2023). By strengthening employees' control over the temporal boundaries of work and limiting expectations of constant availability, R2D interventions may reduce psychosocial strain and mitigate the negative wellbeing effects associated with high job demands. Empirical research reveals that greater autonomy over working time is associated with lower stress and improved mental health, particularly when supported by organizational practices that respect employees' right to rest (Oakman et al. 2020).

However, industrial relations scholarship highlights important limitations to this individualized interpretation. In most cases, R2D policies function as procedural rights that require translation into workplace practices through collective bargaining, consultation or internal firm policies. Their effectiveness, therefore, depends on institutional conditions, including the strength of employee representation, collective bargaining coverage and enforcement capacity. Drawing on the concept of 'beneficial constraints', labour regulations enhance worker wellbeing not simply by granting formal rights, but by constraining employer discretion in ways that are collectively enforced and institutionally supported (Streeck 1997).

Where R2D provisions rely primarily on voluntary compliance, non-binding guidance or decentralized negotiations in contexts of weak employee representation, workers may lack the power necessary to exercise their R2D without fear of reprisal. In such cases, R2D policies may have limited impact on actual working practices or may even exacerbate work intensification if workloads are compressed into shorter timeframes without a reduction in demands (Kelliher and Anderson 2009). Conversely, in countries with stronger collective bargaining institutions and more robust enforcement mechanisms, R2D policies are more likely to operate as effective constraints on expectations of digital availability, generating more substantial wellbeing gains.

2.4 | Institutional Context and Heterogeneous Policy Effects

Cross-national variation in the design and implementation of R2D policies provides a valuable opportunity to examine how institutional contexts shape policy outcomes. European countries differ markedly in the legal status of R2D provisions, the role assigned to collective bargaining and the extent to which compliance is enforceable. These differences reflect broader variation in industrial relations systems, including the balance of power between employers and workers and the capacity of institutions to regulate working conditions.

Such institutional variation highlights that the effects of R2D legislation are unlikely to be uniform across countries. In contexts where R2D is embedded within established collective bargaining frameworks and supported by enforcement mechanisms, employees may be better positioned to negotiate meaningful limits on digital availability. By contrast, where R2D relies on firm-level discretion or non-binding guidance, employees may remain exposed to work intensification despite the formal existence of the right.

At the same time, institutional arrangements intersect with gendered patterns of paid and unpaid work to shape how R2D

TABLE 1 | Overview of the right-to-disconnect legislation in France, Belgium, Spain, Ireland and Portugal.

Country	Title of legislation (or policy)	Date enforced	Scope	Implementation
France	Article L2242-17 of the Labour Code	January 2017	All firms	Firms with ≥ 50 employees must negotiate R2D terms with a trade union or employee representative but are not obligated to reach an agreement. If a legally binding agreement (ex. collective agreement) is not made, a unilateral workplace charter should be drawn up. Firms with < 50 employees are encouraged to negotiate R2D terms. Sectoral-level collective agreements can extend coverage to employees of these firms. Employees can exercise their right on an individual basis by claiming a violation of their firm's duty to care but may require legal counsel or trade union support.
Belgium	Article 16 of Act regarding strengthening economic growth and social cohesion	March 2018	All firms	Firms with ≥ 50 employees must negotiate R2D terms with a trade union or employee representative. (Amended in 2023 to firms with ≥ 20 employees and requirement for company policy in the absence of a formal agreement) Firms with < 50 employees are encouraged to negotiate R2D terms with a trade union or employee representative. Sectoral-level collective agreements can extend coverage to employees of these firms.
Spain	Organic Law 3/2018 on the protection of personal data and guarantee of digital rights	December 2018	All firms	All firms must implement an R2D policy, negotiations with a trade union or equivalent employee representative are encouraged.
Ireland	Code of Practice for Employers and Employees on the R2D	April 2021	All firms	Practical guidance for all firms and employee representatives such as trade unions on best practices regarding the implementation and management of an R2D policy.
Portugal	Law No. 83/2021	January 2022	All firms	Duty for firms to refrain from contacting employees outside of working hours to ensure compliance with employees' right to rest.

policies are experienced in practice. Even where R2D provisions reduce paid working time or digital availability at the workplace-level, women may not experience corresponding improvements in wellbeing if reductions are offset by increased unpaid labour within households. Examining both cross-country and gendered effects is, therefore, essential for understanding the distributive consequences of digital labour regulation.

Taken together, these perspectives suggest that the impact of R2D legislation on employee wellbeing is contingent on institutional and social contexts. Empirical analysis that accounts for variation across countries and gender groups is necessary to assess whether R2D policies operate as effective protective interventions or remain largely symbolic in practice.

3 | Data and Empirical Strategy

3.1 | Data and Sample Construction

To evaluate the impact of R2D legislation on employee wellbeing, I draw on data from the European Social Survey (ESS), a biennial cross-national survey conducted in over 30 European countries. The ESS employs probability-based sampling to generate nationally representative samples of individuals aged 15 and over residing in private households. Minimum sample sizes are 800 respondents in countries with fewer than two million residents and 1500 otherwise. Data are collected primarily through face-to-face interviews, with limited use of self-completion modes in Wave 10 (2020) due to the COVID-19 pandemic.

The analysis uses six ESS waves spanning 2010–2020, allowing observation of wellbeing outcomes before and after the introduction of R2D legislation in France (2017), Belgium and Spain (2018–2019), and Ireland and Portugal (2021). This time horizon provides multiple pre-treatment periods for assessing parallel trends and captures early post-treatment dynamics following implementation.

The sample is restricted to employees working in private-sector firms in *teleworkable occupations*, defined as occupations in major groups 1–4 of the International Standard Classification of Occupations (ISCO-08), who report working 30 or more contracted hours per week. Prior research demonstrates that these occupational groups are substantially more likely to engage in telework and to experience work intensification related to digital connectivity (Eurofound 2022b, 2023; Sostero et al. 2020). This restriction aligns the analysis with the population most plausibly affected by R2D legislation.

Because consistent, direct measures of telework are not available across ESS waves, the analysis adopts an intent-to-treat design. That is, the treatment group includes workers who are likely—but not guaranteed—to be exposed to R2D provisions. Some individuals in teleworkable occupations may not telework in practice, while some teleworkers may fall outside this occupational classification. As a result, the estimated effects should be interpreted as conservative lower-bound estimates of the impact of R2D legislation. This design choice prioritizes cross-national comparability and transparency over precision, directly addressing concerns about data quality and interpretation.

Italy is excluded from the analysis despite adopting R2D legislation during the study period, as it participated in only four ESS waves, limiting the availability of pre-treatment observations required for credible difference-in-differences estimation.

3.2 | Outcome Measures

The primary outcomes are three dimensions of subjective wellbeing: life satisfaction, happiness and self-rated health. These measures capture distinct but related aspects of wellbeing and are widely used in comparative social policy and labour market research.

Life satisfaction reflects evaluative wellbeing and is measured on a 10-point scale capturing respondents' overall assessment of their lives. Happiness captures hedonic wellbeing and measures respondents' affective state at a given moment, also on a 10-point scale. Self-rated health captures respondents' general health status on a 5-point scale ranging from 'very bad' to 'very good', reflecting a composite assessment of physical, mental and social wellbeing, consistent with the World Health Organization's definition of health.

These measures have been extensively validated and shown to be reliable indicators of wellbeing in policy evaluation contexts (Clark et al. 2008; Diener et al. 2013; Frijters and Krekel 2021; Helliwell 2019). Because they capture different dimensions of wellbeing and may respond differently to policy interventions, each outcome is analysed separately rather than combined into an index.

3.3 | Working Time as a Potential Mechanism

To explore a potential mechanism linking R2D legislation to wellbeing outcomes, I also examine changes in total working time. Prolonged working hours, particularly unpaid overtime, are a core manifestation of work intensification among teleworkers and a central concern in policy debates surrounding digital overconnectivity.

Total working time is measured using respondents' self-reported usual weekly hours in their main job, including both paid and unpaid overtime. While changes in working time are not the sole pathway through which R2D legislation may affect wellbeing, evidence of systematic reductions would be consistent with the policy's stated objective of protecting employees' rest time.

3.4 | Empirical Strategy

The empirical analysis exploits the staggered introduction of R2D legislation across countries using a dynamic difference-in-differences (DiD) design. The core intuition is straightforward: I compare changes in wellbeing outcomes for workers in countries that adopted R2D legislation to changes for similar workers in countries that did not, before and after the policy was introduced.

Formally, the analysis employs the doubly robust DiD estimator developed by Callaway and Sant'Anna (2021), which is specifically designed for settings with staggered treatment timing. This approach estimates group-time average treatment effects, allowing the impact of R2D legislation to vary across countries and over time, and avoids biases associated with traditional two-way fixed effects models in such contexts.

Countries are grouped according to the year in which R2D legislation first came into effect: France (2017), Belgium and Spain (2019), and Ireland and Portugal (2021). The control group consists exclusively of countries that did not adopt R2D legislation at any point during the observation period. Countries that eventually introduce R2D are never used as controls for other treated countries. The empirical strategy, therefore, identifies treatment effects by comparing within-country changes before and after the introduction of R2D to contemporaneous changes in this fixed group of never-treated countries.

Treatment effects are aggregated using a dynamic weighting scheme that averages effects by length of exposure to the policy, while also allowing for partial aggregations that highlight heterogeneity across groups and time. All models condition on a set of pre-treatment covariates that predict wellbeing trajectories in the absence of treatment, including age, gender, education, household income, occupation and establishment size. Standard errors are clustered at the country level.

3.5 | Identification Assumptions and Diagnostics

The validity of the empirical strategy rests on four key assumptions: (1) once a country adopts R2D legislation, it remains treated; (2) there are no anticipatory treatment effects; (3) treated and control units are comparable conditional on observed covariates; and (4) treated and control groups would have followed parallel trends in the absence of treatment.

The first assumption holds, as no country repealed R2D legislation during the study period. Regarding anticipation, policy debates preceded implementation in several countries, raising the possibility that some firms adopted R2D practices prior to formal enactment. However, available evidence indicates that early adoption was rare. For example, in Spain, fewer than 0.002% of collective agreements included R2D clauses prior to the law's passage (Eurofound 2021). To further mitigate potential bias, I allow for a 1-year anticipation period and focus comparisons on adjacent pre-treatment periods.

To assess comparability between treated and control groups, I conduct balance tests examining changes in key sociodemographic characteristics before and after treatment. These tests reveal no substantively meaningful differences, supporting the plausibility of the identifying assumptions (refer to Table 2). Finally, pre-treatment trends are examined using both statistical tests and visual inspection of event-study estimates, which show no systematic deviations from parallel trends. These diagnostics are reported alongside the main results (please refer to Figure 1 for visualization of the empirical strategy).

4 | Results

4.1 | Total Average Treatment Effects

I begin by examining the total average treatment effects of the R2D legislation on employee wellbeing across all treated countries. Using the dynamic aggregation approach proposed by Callaway and Sant'Anna (2021), which averages treatment effects by length of exposure to the intervention, I observe modest increases in wellbeing following the implementation of R2D legislation. The estimated total treatment effect is 0.14 standard deviation units (SD) for life satisfaction (95% CI: −0.05, 0.32), 0.20 SD for happiness (95% CI: 0.06, 0.34) and 0.02 SD for self-rated health (95% CI: −0.06, 0.10) (Table 3 and Figure 2). Among these outcomes, only the effect on happiness is statistically significant at the 10% level.

Pre-treatment diagnostics provide no evidence of systematic violations of the conditional parallel trends assumption. The Wald tests fail to reject the null hypothesis of parallel trends after conditioning on pre-treatment covariates, and the uniform confidence bands cover zero in all pre-treatment periods (Figure 2). While these aggregate results indicate a limited average effect of R2D legislation on wellbeing, they mask substantial variation across treatment groups, time and outcomes.

4.2 | Heterogeneity Across Treatment Groups and Countries

To examine this heterogeneity, I next analyse group-time average treatment effects across treatment groups and countries (refer to Figures 3–10). Table 3 shows that statistically significant positive effects on life satisfaction and happiness emerge for the 2017 treatment group (France) 3 years after implementation, while statistically significant negative effects are observed for the 2021 treatment group (Ireland and Portugal) 1 year after implementation. These patterns indicate that the effects of R2D legislation vary across cohorts and over time.

Table 4 reports total average treatment effects by treatment group, calculated by averaging group-specific effects rather than weighting by length of exposure. Using this alternative aggregation approach, no statistically significant average effects are observed across groups. However, disaggregated estimates reveal a statistically significant positive effect on happiness for the 2017 group and a statistically significant negative effect on happiness for the 2021 group, reinforcing the presence of meaningful cross-group variation.

To further unpack these patterns, Table 5 presents country-specific treatment effects. The results show positive effects on wellbeing outcomes in France and Belgium, and negative or null effects in Spain, Ireland and Portugal, although not all estimates are statistically significant. Visual inspection of the dynamic treatment effects (Figures 6–10) highlights substantial variation in both the direction and timing of effects across countries. In particular, Spain appears to contribute disproportionately to the negative treatment effects observed for life satisfaction within the 2019 treatment group.

TABLE 2 | Difference-in-difference estimators to test 'as-if' random sampling assumption.

Variables	2017 Group (France)	*p* value	2019 Group (Spain and Belgium)	*p* value
Age (years)	−0.437 (0.957)	0.648	−0.243 (1.269)	0.848
Gender (1–2)	0.0111 (0.037)	0.766	0.032 (0.050)	0.518
Education (1–7)	0.413 (0.210)	0.050	0.311 (0.277)	0.041
Marital status (1–6)	−0.075 (0.097)	0.436	0.181 (0.129)	0.262
Settlement type (1–6)	0.078 (0.089)	0.381	0.138 (0.119)	0.246
Household total net income (1–10)	0.776*** (0.186)	< 0.001	0.117 (0.244)	0.630
Type of organization (1–6)	0.007 (0.090)	0.939	−0.097 (0.121)	0.423
Employment contract (1–3)	−0.052 (0.034)	0.1222	−0.060 (0.045)	0.183
Establishment size (1–5)	0.145 (0.098)	0.140	0.250 (0.131)	0.057

Note: Information in brackets under each variable name refers to the measurement scale. Number in brackets under Diff-in-Diff value refers to standard error. *, **, *** indicate significance at the 10%, 5% and 1% levels, respectively. Pre-treatment time period begins 2012.

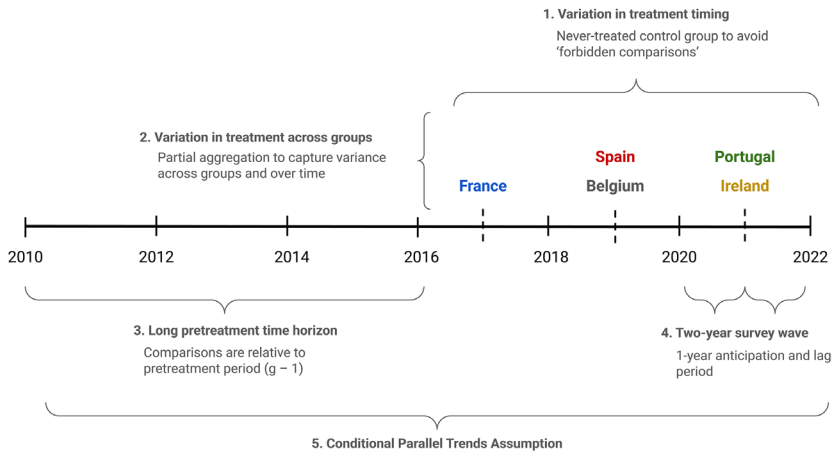

FIGURE 1 | Policy adoption across France, Spain, Belgium, Portugal, and Ireland (2016–2021), illustrating cross-group and temporal variation. Effects are estimated relative to the pretreatment period (g – 1) using a never-treated control group, under a conditional parallel trends assumption. [Colour figure can be viewed at wileyonlinelibrary.com]

4.3 | Gender Differences in Treatment Effects

I next examine whether the effects of R2D legislation differ by gender. Table 6 reports total average treatment effects for men and women pooled across all treated countries using the dynamic aggregation approach. The results indicate more favourable outcomes for men across all three wellbeing measures. The gender gap is most pronounced for health, where a statistically significant negative treatment effect of −0.68 SD is observed for women, compared to a small and statistically insignificant positive effect for men.

Country-level gender comparisons (Table 7) reveal similar patterns. In all countries except France, men experience more positive treatment effects than women. Belgium stands out in this regard, with men exhibiting statistically significant positive effects across all three wellbeing measures. France is the only country in which women outperform men, driven by a statistically significant positive effect on happiness.

4.4 | Working Time as a Potential Mechanism

Finally, I assess whether changes in total working time may help explain the observed wellbeing effects. Using the same dynamic aggregation approach, I estimate the impact of R2D legislation on total working time, defined as contracted hours plus paid and unpaid overtime. The estimated total treatment effect is 0.17

TABLE 3 | Difference-in-difference results: Total average treatment effects and group-time average treatment effects for teleworkers in 2017 (France), 2019 (Belgium and Spain) and 2021 (Ireland and Portugal) treatment groups.

	$ATT(group, time)$						
	(2017, 2018)	(2017, 2020)	(2017, 2022)	(2019, 2020)	(2019, 2022))	(2021, 2022)	Total
Life satisfaction	0.048	0.654*	0.238	−0.273	0.19	−0.282	0.136
	(0.17)	(0.16)	(0.16)	(0.12)	(0.11)	(0.13)	(0.08)
Happiness	0.217	0.62*	0.377	−0.082	0.117	−0.316*	0.20 *
	(0.14)	(0.14)	(0.13)	(0.10)	(0.09)	(0.11)	(0.07)
Health	−0.066	0.032	0.037	0.033	0.038	−0.73	0.015
	(0.07)	(0.07)	(0.06)	(0.05)	(0.05)	(0.05)	(0.04)
Observations							25, 417

Note: Total treatment effects are estimated using the dynamic aggregation of ATT (group, time), which computes an average treatment effect by length of exposure to the R2D legislation. Standard errors are reported in parentheses clustered at the country-level. Difference-in-difference model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size. *, **, *** indicate significance at the 10%, 5% and 1% levels, respectively. Teleworkers are employees working in ISCO major groups 1–4.

TABLE 4 | Difference-in-difference results: Total average treatment effects by treatment group (2017, 2019 and 2021).

	ATT			
	2017	2019	2021	Total
Life satisfaction	0.313	−0.414	−0.282	−0.033
	(0.14)	(0.09)	(0.13)	(0.07)
Happiness	0.406*	0.018		0.004
	(0.11)	(0.09)	−0.316*	(0.05)
			(0.11)	
Health	0.00	0.036	−0.073	−0.009
	(0.06)	(0.05)	(0.05)	(0.03)
Observations				25 , 417

Note: Total treatment effects are estimated using the group-specific effects of ATT (group, time), which computes an average of the average treatment effect for each group. Standard errors are reported in parentheses clustered at the country-level. Difference-in-difference model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size. *, **, *** indicate significance at the 10%, 5% and 1% levels, respectively. Teleworkers are employees working in ISCO major groups 1–4.

SD (95% CI: −0.67, 0.98), and is not statistically significant. Pre-treatment diagnostics again provide no evidence of violations of the parallel trends (Figure 11).

Disaggregating by gender reveals divergent patterns. Men experience a negative (though statistically insignificant) treatment effect on working time, while women experience a positive (also statistically insignificant) effect. These opposing trends mirror the gendered patterns observed in wellbeing outcomes. Further country-specific analysis indicates particularly large gender differences in Spain, where men's working time decreases, while women's working time increases following the introduction of R2D legislation. By contrast, in Belgium, men exhibit an increase in working time, while women experience a reduction.

5 | Discussion

5.1 | Average Effects and Their Limits

This study examined the impact of R2D legislation on employee wellbeing across five European countries, focusing on life satisfaction, happiness and self-rated health among workers in teleworkable occupations. At an aggregate level, the findings show modest improvements in wellbeing following the introduction of R2D policies, with a statistically significant effect observed for happiness. Effects on life satisfaction and health are smaller and not statistically distinguishable from zero.

This pattern suggests that R2D legislation may primarily influence short-run affective wellbeing by alleviating anticipatory stress and psychological strain associated with constant digital availability, rather than producing immediate changes in broader evaluative wellbeing or health. From an occupational health perspective, this is consistent with evidence that greater control over working time boundaries can reduce emotional strain even in the absence of substantial reductions in total working hours (Karasek 1979; Oakman et al. 2020). At the same time, the modest magnitude of these average effects cautions against interpreting R2D legislation as a comprehensive solution to the wellbeing challenges posed by telework.

5.2 | Institutional Mediation and Cross-National Variation

More substantively, the analysis reveals pronounced heterogeneity in wellbeing outcomes across countries. Positive effects are observed in France and Belgium, while null or negative effects emerge in Spain, Ireland and Portugal. These differences are difficult to reconcile with explanations centred solely on individual autonomy or behavioural change and instead point to the central role of industrial relations institutions in mediating the effects of R2D legislation.

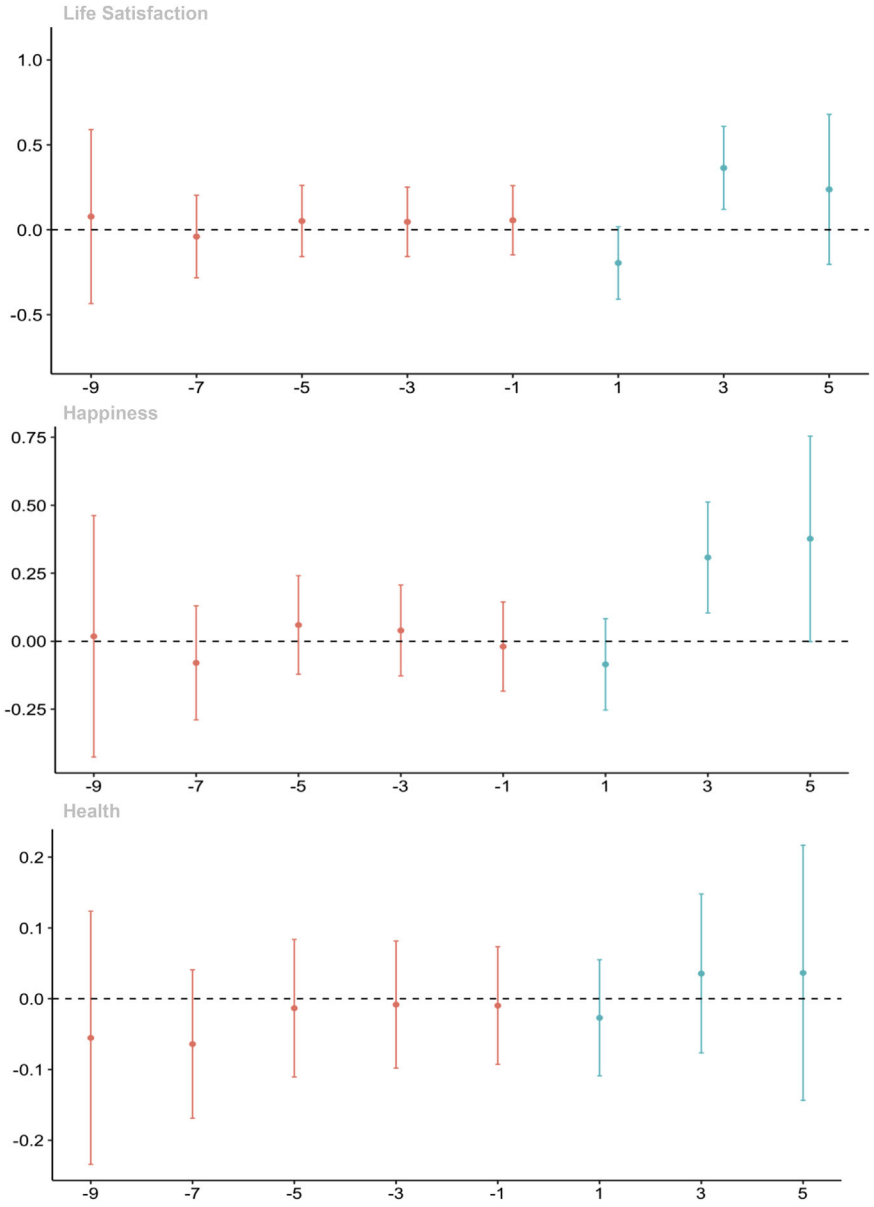

FIGURE 2 | Total average treatment effects. *Notes:* R2D legislation total average treatment effects for treated groups 2017 (France), 2019 (Belgium and Spain) and 2021 (Ireland and Portugal) using dynamic aggregation method. Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
[Colour figure can be viewed at wileyonlinelibrary.com]

France and Belgium are characterized by comparatively strong systems of collective labour regulation, marked by high collective bargaining coverage, institutionalized social dialogue and established mechanisms for extending negotiated agreements beyond union members. According to the Eurofound Industrial Relations Index, both countries consistently score above the EU average in the domain of *industrial democracy*, reflecting strong worker representation rights, dense bargaining structures and relatively robust enforcement capacity (Eurofound 2018, 2021). In these contexts, R2D provisions are embedded within collective bargaining frameworks that require negotiation with employee representatives and are supported by legal doctrines – such as the employer's duty of care in France – that facilitate enforcement. This institutional environment increases the likelihood that R2D policies operate as effective constraints on employer expectations of constant availability, consistent with industrial relations theories emphasizing the role of collectively enforced rules in shaping working conditions (Streeck 1997; Baccaro and Howell 2017).

By contrast, Spain, Ireland and Portugal exhibit weaker or more fragmented institutional arrangements for regulating working time at the workplace level, despite important differences among them. Spain has experienced a marked decentralization of

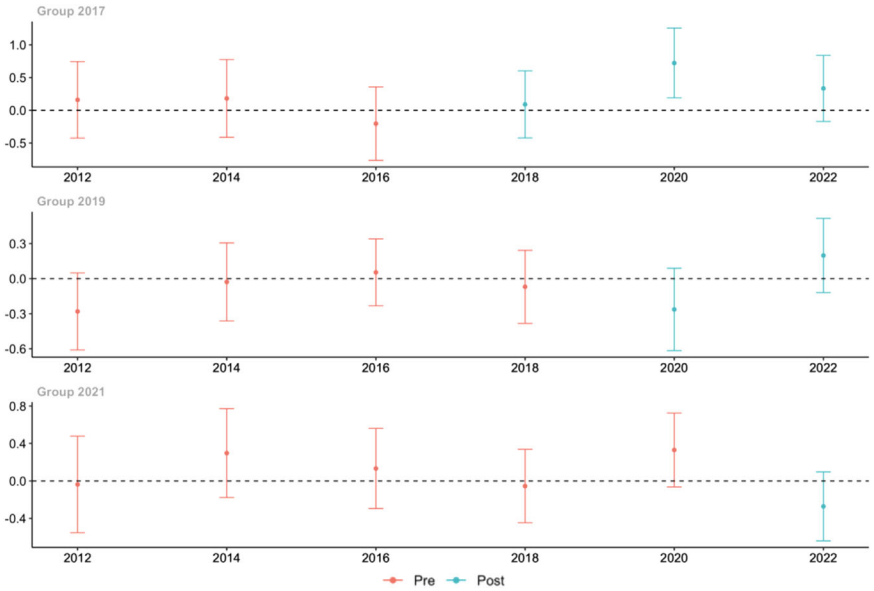

FIGURE 3 | Total group-time average treatment effects for life satisfaction. *Notes:* R2D legislation group-time average treatment effects for treated groups 2017 (France), 2019 (Belgium and Spain) and 2021 (Ireland and Portugal). Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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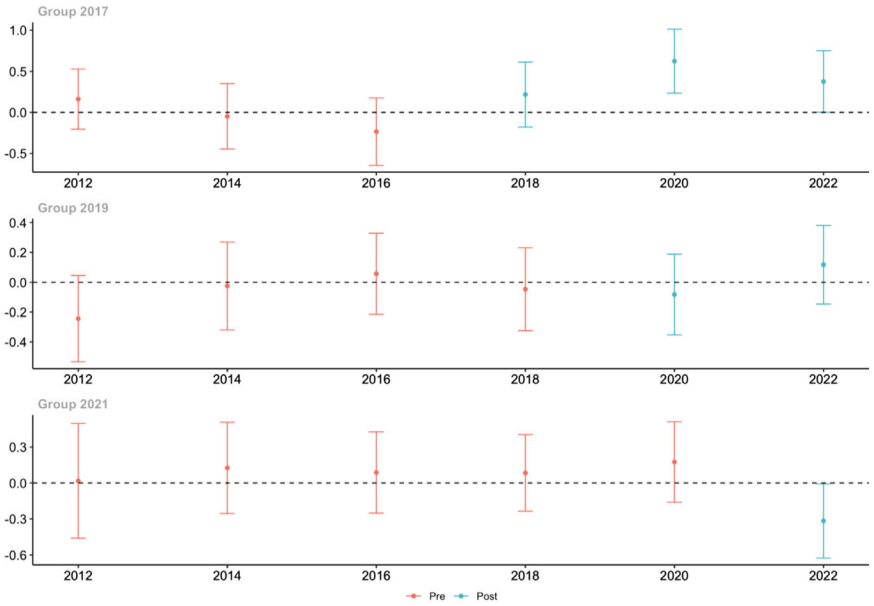

FIGURE 4 | Total group-time average treatment effects for happiness. *Notes:* R2D legislation group-time average treatment effects for treated groups 2017 (France), 2019 (Belgium and Spain) and 2021 (Ireland and Portugal). Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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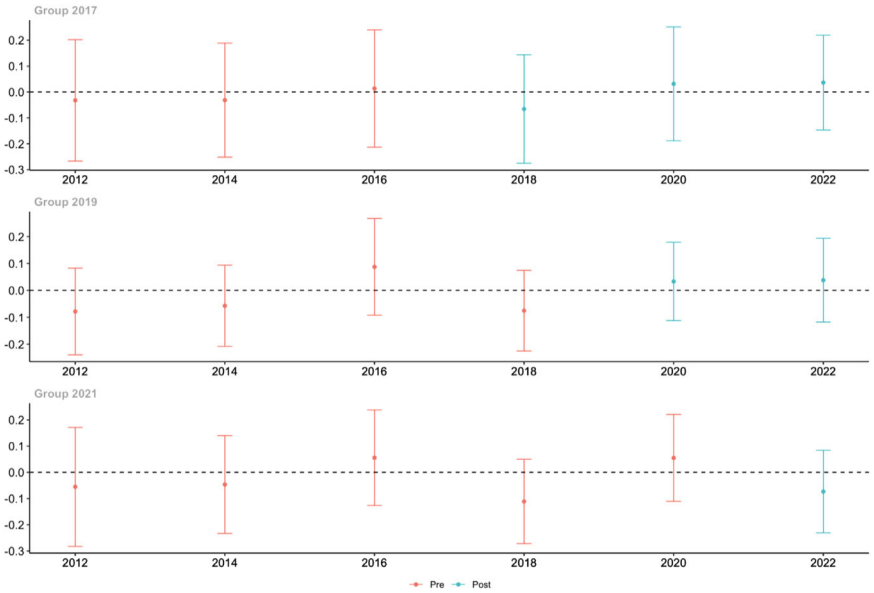

FIGURE 5 | Total group-time average treatment effects for health. *Notes:* R2D legislation group-time average treatment effects for treated groups 2017 (France), 2019 (Belgium and Spain) and 2021 (Ireland and Portugal). Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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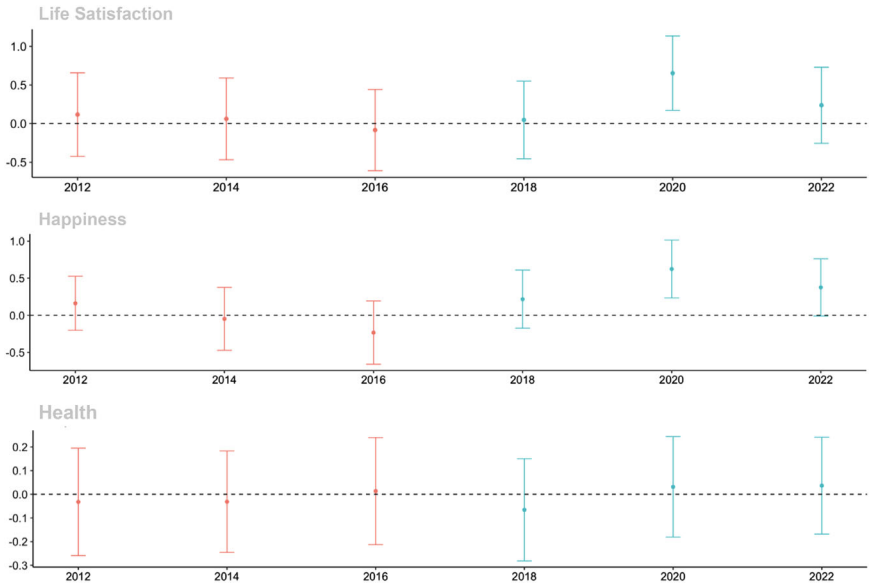

FIGURE 6 | France – Total average treatment effects for life satisfaction, happiness and health. *Notes:* R2D legislation group-time average treatment effects for France. Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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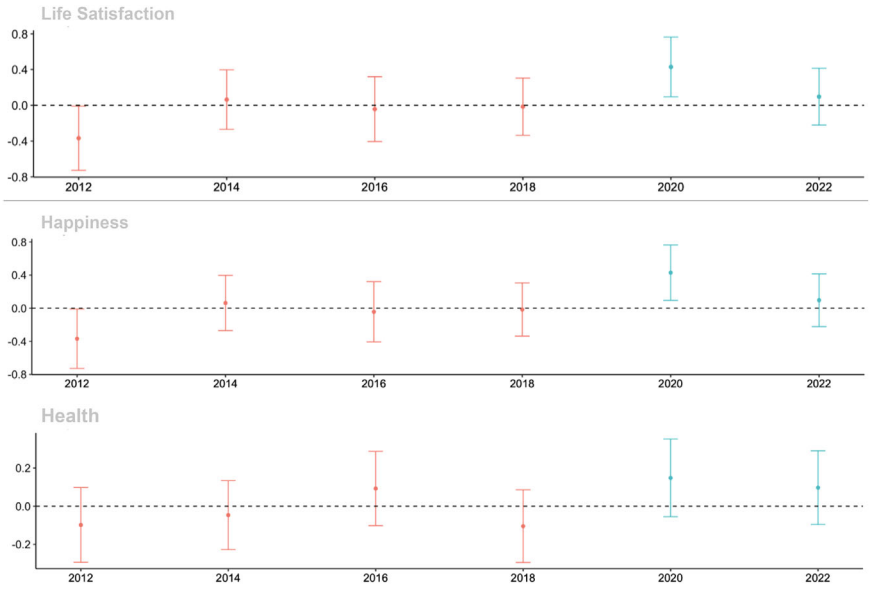

FIGURE 7 | Belgium – Total average treatment effects for life satisfaction, happiness and health. *Notes:* R2D legislation group-time average treatment effects for Belgium. Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size. [Colour figure can be viewed at wileyonlinelibrary.com]

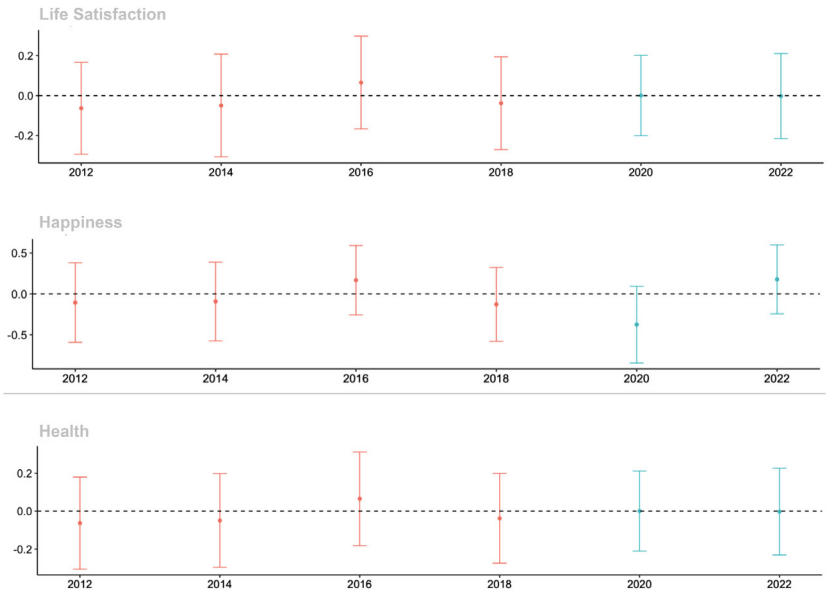

FIGURE 8 | Spain – Total average treatment effects for life satisfaction, happiness and health. *Notes:* R2D legislation group-time average treatment effects for Spain. Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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collective bargaining over the past decade, shifting regulatory authority from sectoral to firm level and weakening unions' capacity to shape workplace practices, particularly in smaller firms (Thommen 2022; Molina and Rhodes 2007). Although R2D provisions apply formally to all firms, enforcement relies heavily on firm-level implementation, limiting their practical reach in contexts of asymmetric power. Ireland's industrial relations system is characterized by comparatively low collective bargaining coverage and a voluntarist tradition in which non-binding codes of practice play a prominent role (Roche 2007). In this setting, the R2D operates primarily as guidance rather than a legally enforceable right, constraining employees' ability

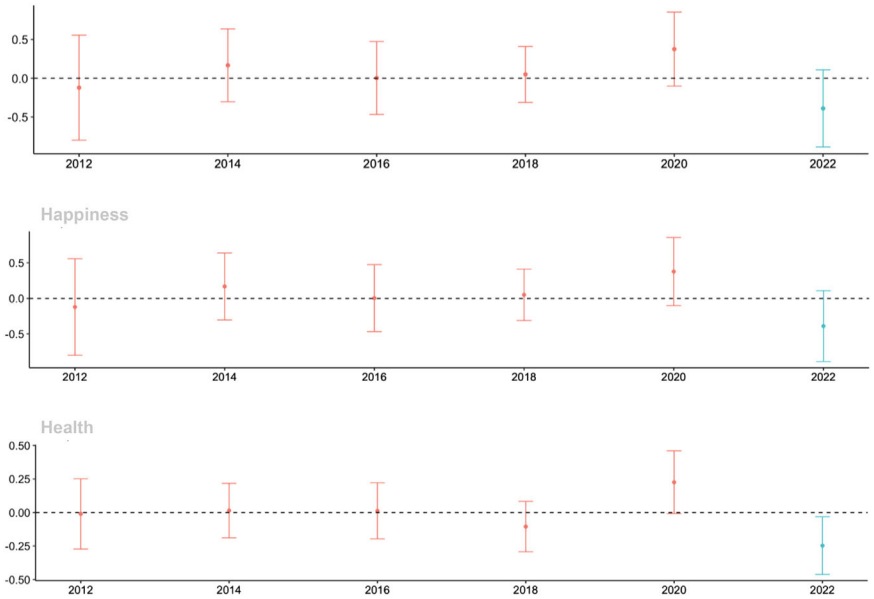

FIGURE 9 | Ireland – Total average treatment effects for life satisfaction, happiness and health. *Notes:* R2D legislation group-time average treatment effects for Ireland. Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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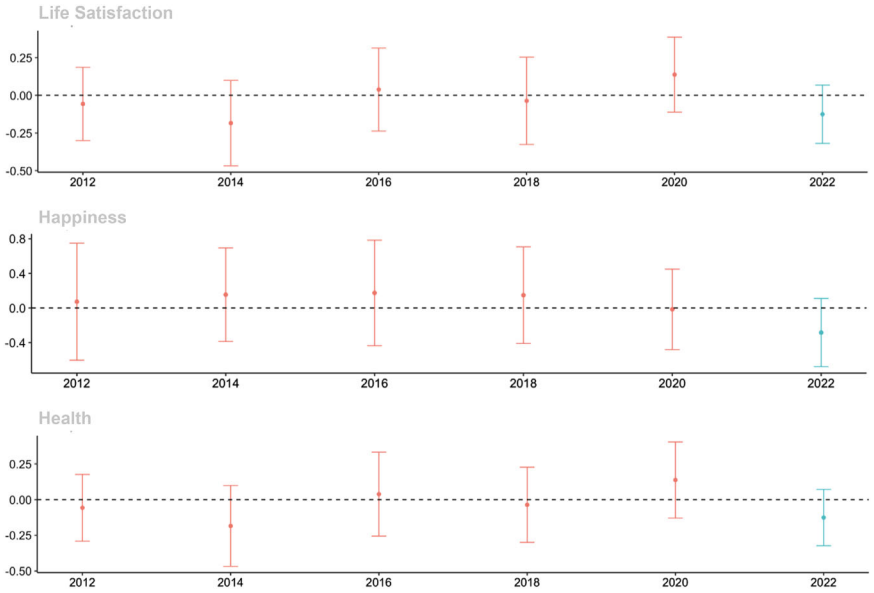

FIGURE 10 | Portugal – Total average treatment effects for life satisfaction, happiness and health. *Notes:* R2D legislation group-time average treatment effects for Portugal. Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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to invoke it without recourse to individual litigation. Portugal, while formally adopting a more prescriptive statutory approach, faces longstanding challenges related to enforcement capacity and uneven compliance, particularly in smaller firms and service sectors (Eurofound 2021).

Taken together, these institutional differences help explain why R2D legislation appears to generate more favourable wellbeing outcomes in countries where collective bargaining coverage is high, and enforcement mechanisms are well established, and weaker or negative outcomes where regulation relies more

TABLE 5 | Difference-in-difference results: Total average treatment effects by treatment country (France, Belgium, Spain Ireland and Portugal) total observations equals 24,417.

	$ATT(group, time)$				
	France (2017)	Belgium (2019)	Spain (2019)	Ireland (2021)	Portugal (2021)
Life satisfaction	0.313	0.379*	−0.28	−0.071	−0.60*
	(0.14)	(0.11)	(0.15)	(0.21)	(0.16)
Happiness	0.406*	0.263*	−0.099	−0.340	−0.286
	(0.11)	(0.10)	(0.13)	(0.18)	(0.139)
Health	0.00	0.123	−0.001	−0.247*	−0.125
	(0.06)	(0.06)	(0.06)	(0.08)	(0.06)

Note: Total treatment effects are estimated using the group-specific effects of ATT (group, time), which computes an average of the average treatment effect for each group. Standard errors are reported in parentheses clustered at the country-level. Difference-in-difference model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size. *, **, *** indicate significance at the 10%, 5% and 1% levels, respectively. Teleworkers are employees working in ISCO major groups 1–4.

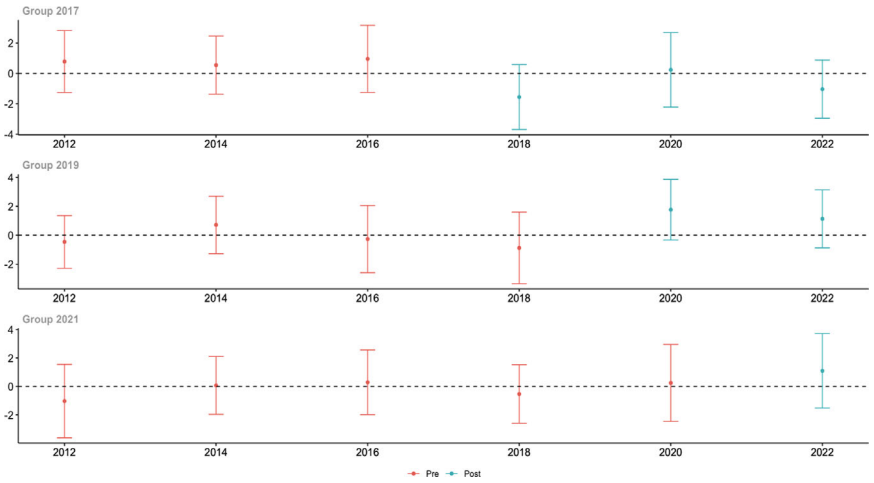

FIGURE 11 | Total group-time average treatment effects for working time. *Notes:* R2D legislation group-time average treatment effects for Portugal. Red lines give point estimates and simultaneous 95% confidence bands for pre-treatment periods allowing for clustering at the country level. Blue lines provide point estimates and simultaneous 95% confidence bands for the treatment effect of the R2D legislation allowing for clustering at the country-level. Under the null hypothesis of the parallel trends assumption holding in all periods, these should be equal to 0. Model is conditioned on the following set of pre-treatment covariates: age, gender, education, household total net income, occupation and establishment size.
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heavily on firm discretion or individual assertion. These findings speak directly to longstanding debates in industrial relations concerning the limits of procedural rights in contexts of unequal power. Where regulatory interventions depend on voluntary compliance or decentralized negotiation, their effectiveness is likely to vary systematically with institutional strength. The results, therefore, show that R2D legislation does not operate as a uniform policy instrument, but rather amplifies existing cross-national differences in the regulation of working time and digital availability.

5.3 | Gendered Mechanisms and the Organization of Total Work Time

The gendered patterns observed in the analysis further underscore the importance of institutional and social context in shaping the effects of R2D legislation. Across most countries, men experience more positive wellbeing effects from R2D policies than women, with particularly pronounced benefits observed among men in Belgium. Women, by contrast, often experience smaller gains or negative effects, especially with respect to health outcomes. These patterns are consistent with a substantial body of research showing that the consequences of working-time regulation are mediated by gendered divisions of paid and unpaid labour rather than determined solely by conditions of paid employment (Acker 1990; Fagan et al. 2012; Chung 2020; Lott and Chung 2016).

From a gender and work perspective, these findings can be interpreted through the lens of *total workload* and *boundary management*. Feminist political economy and sociological theories of work have long emphasized that women's labour market experiences are inseparable from their disproportionate responsibility for unpaid domestic and care work (Acker 1990; Schieman and Glavin 2008; Glavin and Schieman 2012). Telework, in

TABLE 6 | Difference-in-difference results: Total average treatment effects for teleworkers by gender for all treatment countries.

	ATT		
	Men	Women	Difference
Life satisfaction	0.162	0.065	0.097
	(0.12)	(0.13)	
Happiness	0.203*	0.158	0.045
	(0.10)	(0.11)	
Health	0.069	−0.678	0.747
	(0.05)	(0.05)	
Observations	14, 554	10, 849	

Note: Total treatment effects are estimated using the dynamic aggregation of ATT (group, time), which computes an average treatment effect by length of exposure to the R2D legislation. Standard errors are reported in parentheses clustered at the country-level. Difference-in-difference model is conditioned on the following set of pre-treatment covariates: age, education, household total net income, occupation and establishment size. *, **, *** indicate significance at the 10%, 5% and 1% levels, respectively. Teleworkers are employees working in ISCO major groups 1–4.

particular, has been shown to intensify this interdependence by collapsing spatial and temporal boundaries between paid work and home life, increasing women's exposure to simultaneous and competing demands (Mazmanian et al. 2013; Allen et al. 2014; Chung 2020).

Analysis of working time in this study provides insight into how these dynamics may shape the gendered effects of R2D legislation. While R2D policies may reduce paid working time or digital availability, particularly for men, these reductions do not necessarily translate into equivalent reductions in women's total workload. Instead, reductions in paid work may be offset by increases in unpaid domestic labour, resulting in little net improvement in wellbeing. This interpretation aligns with research showing that telework often reinforces traditional gender roles by facilitating the reallocation of care and household responsibilities rather than challenging underlying inequalities in the division of labour (de Laat 2025; Hilbrecht et al. 2008; Kim 2020; Kurowska 2020; Chung and Booker 2023).

The gendered effects observed here are also consistent with theories of boundary control and role permeability. While R2D legislation formally strengthens workers' ability to disengage from paid work, women's boundaries between work and non-work are often more permeable due to persistent expectations around caregiving and household management (Sullivan and Lewis 2001; Windeler et al. 2017). As a result, the capacity to disconnect from paid work may not generate equivalent restorative benefits for women if disconnection from employment coincides with intensified unpaid labour. In this sense, R2D policies may alleviate one source of strain while leaving others intact or even exacerbated.

Importantly, these findings should not be interpreted as evidence that R2D policies are inherently disadvantageous for women. Rather, they highlight the limitations of regulatory interventions that focus narrowly on paid work without addressing the broader social organization of care. Gender scholars have long argued that policies aimed at improving work–life balance are most effective when they are embedded within wider institutional arrangements that redistribute care responsibilities and challenge normative assumptions about availability and ideal worker behaviour (Acker 1990; Kelly and Moen 2020; Chung 2022).

From this perspective, the gendered effects of R2D legislation observed in this study reflect not a failure of the policy per se, but the persistence of structural inequalities that shape how workers experience reductions in paid work demands. Without complementary policies—such as affordable childcare, more equal parental leave and stronger protections against unpaid overtime—R2D provisions may yield uneven wellbeing benefits across gender groups. Understanding these dynamics is essential for assessing the distributive consequences of digital labour regulation and for designing interventions that promote more equitable and sustainable work arrangements.

5.4 | Implications for Research on Digital Labour Regulation

Taken together, the findings provide evidence that the R2D legislation should be understood as an institutionally mediated intervention rather than a universal remedy for the challenges of digital work. Where R2D policies are embedded within strong collective bargaining systems and supported by enforcement mechanisms, they may contribute to improved wellbeing by constraining excessive job demands and legitimizing employees' right to rest. Where such institutional supports are weak, or where implementation relies heavily on firm-level discretion or individual assertion, R2D provisions may remain largely symbolic or yield uneven and limited benefits.

For industrial relations scholarship, these results underscore the importance of analysing digital labour regulation through an institutional lens that foregrounds power, enforcement and collective voice. Evaluations that focus solely on the formal existence of rights risk overstating their practical significance and overlooking the processes through which such rights are negotiated, implemented and contested within workplaces. Digital labour regulation, including the R2D, should, therefore, be analysed not only as a legal innovation but as part of a broader regulatory regime shaped by national systems of industrial relations.

The findings also point to the need for closer integration between industrial relations research and gender scholarship in the study of digital work. The uneven wellbeing effects of R2D legislation across gender groups highlight the limits of regulatory approaches that focus narrowly on paid working time without accounting for the organization of unpaid labour and care. Future research on digital labour regulation would benefit from examining how institutional arrangements governing paid work interact with gendered divisions of labour within households, shaping the distributive consequences of ostensibly gender-neutral policies.

More broadly, this study demonstrates that digital labour regulation offers a valuable lens through which to revisit core questions in industrial relations concerning the conditions under which rights translate into meaningful improvements in working conditions. As digital technologies continue to reshape the

TABLE 7 | Difference-in-difference results: Total average treatment effects for teleworkers by country and gender.

	ATT								
	Life satisfaction			**Happiness**			**Health**		
	Men	Women	Diff	Men	Women	Diff	Men	Women	Diff
France	0.209 (0.19)	0.385 (0.18)	−0.18	0.337 (0.16)	0.437* (0.16)	−0.10	0.045 (0.08)	−0.058 (0.08)	0.10
Belgium	0.563 (0.14)	0.033 (0.19)	0.53	0.376* (0.11)	0.060 (0.16)	0.31	0.183* (0.07)	0.00 (0.09)	0.18
Spain	−0.018 (0.19)	−0.602* (0.21)	0.58	0.094 (0.17)	−0.336 (0.16)	0.43	0.105 (0.07)	−0.143 (0.10)	0.25
Ireland	0.005 (0.27)	−0.055 (0.35)	0.06	−0.316 (0.23)	−0.425 (0.29)	0.12	−0.211 (0.11)	−0.292* (0.10)	0.08
Portugal	−0.585 (0.24)	−0.593* (0.22)	0.01	−0.273 (0.21)	−0.272 (0.20)	0.00	−0.187 (0.098)	−0.070 (0.08)	−0.12

Note: Total treatment effects are estimated using the dynamic aggregation of ATT (group, time), which computes an average treatment effect by length of exposure to the R2D legislation. Standard errors are reported in parentheses clustered at the country-level. Difference-in-difference model is conditioned on the following set of pre-treatment covariates: gender, education, household total net income, occupation and establishment size. *, **, *** indicate significance at the 10%, 5% and 1% levels, respectively. Teleworkers are employees working in ISCO major groups 1–4.

temporal organization of work, understanding how regulatory interventions interact with institutional structures and social inequalities will be central to assessing their capacity to promote sustainable and equitable forms of work.

5.5 | Extensions for Future Research

First, the analysis relies on an intent-to-treat approach that identifies workers in teleworkable occupations rather than directly observing telework status or digital availability. While this strategy is appropriate given data constraints and likely yields conservative estimates of policy effects, future research could draw on linked employer–employee datasets, time-use surveys or administrative records to more precisely capture telework intensity, after-hours connectivity and exposure to R2D provisions.

Second, the relatively short post-treatment period for some countries, particularly Ireland and Portugal, limits the ability to observe longer-term institutional and behavioural adjustments. Regulatory interventions such as the R2D legislation may take time to diffuse through collective bargaining processes, organizational practices and workplace cultures. Longitudinal research examining how R2D provisions evolve over successive bargaining rounds and how enforcement practices develop over time would provide valuable insight into the dynamic effects of digital labour regulation.

Third, qualitative and mixed-methods research could complement quantitative evaluations by illuminating the processes through which R2D policies are negotiated, implemented and contested within organizations. Case studies and interviews with managers, employee representatives and workers could help explain why formally similar legal provisions generate divergent outcomes across countries and workplaces, shedding light on the role of power, interpretation and organizational norms in shaping policy effects.

Finally, future research should examine how R2D policies interact with other labour market and family policies, including childcare provision, parental leave and working time regulation. Integrating insights from industrial relations and gender scholarship would help clarify how digital labour regulation intersects with the broader organization of paid and unpaid work, and under what institutional conditions such policies contribute to more equitable and sustainable work arrangements.

6 | Conclusion

The expansion of digitally mediated work has intensified long-standing challenges surrounding working time, employee availability and wellbeing, prompting renewed interest in policy interventions such as the R2D. This study provides one of the first cross-national causal evaluations of R2D legislation, examining its impact on employee wellbeing across five European countries with distinct industrial relations systems. By integrating occupational health theory with an institutional and gender-sensitive perspective, the analysis sheds light on when, for whom and under what conditions such policies shape wellbeing outcomes.

At an aggregate level, the findings indicate that the R2D legislation leads to modest improvements in affective wellbeing, particularly happiness. However, these average effects conceal substantial heterogeneity across countries and gender groups. Positive wellbeing effects are observed in institutional contexts characterized by stronger collective bargaining coverage and enforcement capacity, while weaker or negative effects emerge where implementation relies more heavily on firm-level discretion or non-binding guidance. These patterns underscore that the effectiveness of digital labour regulation depends not only on the articulation of formal rights, but also on the institutional infrastructures that enable workers to exercise them in practice.

The analysis further reveals that the benefits of R2D legislation are unevenly distributed across gender groups. While men often

experience positive wellbeing effects, women's outcomes are more mixed, possibly reflecting persistent gender inequalities in the organization of paid and unpaid work. Reductions in paid working time or digital availability do not necessarily translate into improvements in women's wellbeing when they are offset by increased domestic and care responsibilities. These findings highlight the importance of analysing digital labour regulation through a total workload lens that accounts for the interdependence of paid employment and unpaid labour.

Taken together, the results indicate that the R2D legislation should be understood not as a universal remedy for the challenges of digital work, but as an institutionally mediated intervention in which effects are shaped by power relations, enforcement mechanisms and social norms. For industrial relations scholarship, this study reinforces the value of institutional analysis in evaluating labour market interventions and demonstrates the need to integrate insights from gender research into assessments of working-time regulation. As digital technologies continue to reshape the temporal organization of work, understanding how regulatory rights interact with national industrial relations systems and gendered divisions of labour will be central to assessing their capacity to promote sustainable and equitable work arrangements.

Acknowledgements

None to mention currently.

Ethics Statement

The author has nothing to report.

Conflicts of Interest

I declare that I have no conflicts of interest related to this work.

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