

**AN INTEGRATED APPROACH OF ASSESSING
TELEWORKERS' WELL-BEING AT THE POLICY LEVEL
THROUGH THE LENS OF DECENT WORK**

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Submitted to

Central European University

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In partial fulfillment for the degree of Master of Arts in Public Policy

Budapest, Hungary

2019

Author's Declaration

I, the undersigned **Katherine Johanna Durand Bustamante** hereby declare that I am the sole author of this thesis. To the best of my knowledge this thesis contains no material previously published by any other person except where proper acknowledgement has been made. This thesis contains no material which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

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ABSTRACT

The 21st century is the era of technology and its effect on the work environment has created “teleworking”. Workers’ well-being is a manifestation of “decent work”, a concept developed by the International Labour Organization (ILO) based on the respect for human dignity in all aspects of working life. This study explores the way teleworkers’ well-being is currently measured and assessed. To carry out the research, we analyzed the conceptual framework and data published by the ILO regarding decent work and well-being indicators, as well as teleworking research reports issued by the same organization. Furthermore, we reviewed several studies regarding teleworkers’ well-being, to identify key points to take into consideration when evaluating the goal of decent work in this type of work.

This study concludes that the complexity of teleworkers’ well-being challenges the way it is currently measured by the existent decent work’ indicators, we present its limitations and a proposal for further development. Our aim is to contribute to the debate of how the current way of measuring decent work should extend its components and interpretation to the specific nature of teleworkers’ well-being and therefore formulate a comprehensive approach which can be utilized at the policy level.

ACKNOWLEDGEMENTS

To my dad, who became my angel right after I arrived in Budapest.

My strength and weakness.

My deepest love and biggest fan.

A mi papá, quien se convirtió en mi ángel unos días después que llegué a Budapest.

Mi fortaleza y debilidad.

Mi más profundo amor y mi más grande fan.

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List of Abbreviations

| | |
|-----------|--|
| Eurofound | European Foundation for the Improvement of Living and Working Conditions |
| EWCS | European Working Conditions Survey 2015 |
| ICT | Information and Communication Technologies |
| ILO | International Labour Organization |
| MDG | Millennium Development Goals |
| SDG | Sustainable Development Goals |
| TME | Tripartite Meeting of Experts |
| UN | United Nations |
| WHO-5 | World Health Organization's Well-Being Index |

Introduction

Work is a significant part of life for most people around the world. Work can be crucial for sustaining the individual, the household, the society, and the country at large. Furthermore, work can provide opportunities for economic growth and social participation, which can also improve individual personal fulfilment, well-being, and sense of self-worth (Mogensen, Kathard, Lorenzo, & Pillay, 2019).

As the primary activity of human beings, work has evolved in different ways. The human rights approach has established the goal of decent work and well-being for everyone. At the same time, the evolution of technology has influenced the way we live and, therefore, the work we do, creating a space where teleworking emerged as one of the most innovative alternative work arrangements. These two paths of development related to work are not isolated from each other, because teleworkers are part of the workforce which aspires to achieve decent work and well-being.

Research Question and Aim of the Thesis

The International Labour Organization (ILO) has described “decent work” with dignity, equality, a fair income, and safe working conditions. Decent work puts people at the center of development, rejects exploitation, and envisions a more inclusive and sustainable future. Workers’ well-being is the core of decent work and relates to all aspects of working life: from employers’ compliance with labour rights and regulations and the quality and safety of workers’ physical environment, to how workers feel about their job and work organization.

Teleworking is a type of work arrangement in which work becomes less about where it is done and more about what it produces. In that sense, it is considered to be an employment model that revolves around workers’ independence, mobility, and empowerment within labour relations.

To reach the goal of decent work, there is a set of indicators developed by the ILO. Despite the importance of well-being at the workplace –as a significant component of human development–, and the growing number of teleworkers, the set of indicators to measure the progress towards decent work does not include a comprehensive analysis of workers’ well-being, much less teleworkers’ well-being. This situation constitutes a gap that this study set out to fill.

Hence, the aim of this thesis is to elucidate how teleworkers’ well-being should be measured considering the already existing set of decent work indicators. We expect our analysis to contribute to the conceptualization of decent work; as well as to the scholarly discourse on how the assessment and measurement of decent work can be re-interpreted for new scopes such as well-being and telework, in order to improve the assessment needed when dealing with policy making in this area.

Methodology and Structure of the Thesis

The research follows a qualitative approach based on data analysis. Specifically, we analyzed the conceptual framework and data published by the ILO regarding decent work and well-being indicators, as well as teleworking research reports released by this organization. Additionally, we used data from sources such as the European Working Conditions Survey of 2015 to examine the current methods assessing teleworkers’ well-being. Furthermore, we reviewed several studies regarding teleworkers’ well-being, to identify key points to take into consideration when evaluating the state of decent work in this type of work. The research focused on developing a comprehensive overview of decent work indicators, in order to have an organized and an integrated approach regarding teleworkers’ well-being for future references at the policy level.

The structure of the thesis is as follows. The first chapter introduces the existing conceptual framework and reviews the scholarly literature on the main concepts of the study (i.e., telework, decent work, workers’ well-being). The second chapter examines specifically the current

way of measuring teleworkers' well-being. Finally, the third chapter offers a discussion and policy agenda changing proposal regarding how teleworkers' well-being should be understood and measured through the decent work approach.

Chapter 1 - Conceptual Framework

1.1. Telework

Traditionally, the term “work” is associated with a specific location where waged labour activities take place. The term “telework” challenges this definition by referring to work that is performed from different locations, and by using Information and Communication Technologies (ICT) (Nakrosienė, Buciunienė, & Gostautaitė, 2019). This concept is also known as “telecommuting,” “virtual work,” “home-based teleworking,” “mobile telework,” or “remote work,” among others (Kurland & Bailey, 2002).

There are several advantages of teleworking that have been revealed by previous studies. For teleworkers, it can mean more autonomy (Harpaz, 2002) and more flexible time management, less time spent commuting, less stress, more time with their family, increased job satisfaction, and an overall improved state of mind (Irby, 2014). For employers, it can mean lower infrastructure costs (Orlando Ardia, 2015), a better corporate image, and a more varied work offer (Suárez Barros, 2017)— because teleworkers can be located anywhere in the world. It is also helpful in reducing turnover rates (Bambery, Cummings, Roberts, & Rossiter, 2019), and maintaining continuous operations during natural disasters (Irby, 2014). For society, it reduces traffic and contamination, and increases employment opportunities for workers in traditionally disadvantaged positions in the job market, such as women with children, students, and disabled persons (Morgan, 2004).

However, the scholarly literature on telework has also shown its negative aspects, such as blurring work-life boundaries, added family-work conflict, worker isolation (Golden & Veiga, 2008), missed task opportunities, and reduced career prospects because of reduced visibility (Maruyama & Tietze, 2012), among others.

1.2. Types and Characteristics of Teleworking

There are different types of teleworking depending on which factor is analyzed. There is “autonomous teleworking”, if it is not established in an employment relationship (for example, freelancers or the self-employed). In the context of an employment relationship, we can identify a division regarding the amount of working time, whether it is a “full-time” or “part-time teleworker”; or regarding the disposition of working time, in which case, it could be a “permanent” or “partial teleworker” (with alternating days or hours of work between the office and other places).

Moreover, considering where the teleworker performs the job, the scholarly literature names a multitude of telework types. Morgan, for example, states that it can be a “mobile telework” (not located at any one site but traveling constantly), a “home-based telework” or “telecentres” (local facilities which allow to reduce the cost of commuting to a central location) (Morgan, 2004). However, more comprehensively, the ILO makes the following classification: “hot desking” (where the employee works from a remote location part- or most of the time), “telework centres” (facilities with workstations separate from the main office of the employer), “collaborative offices” (which are virtual work environments easily accessible by a computer network) and “mobile teleworks” (when the teleworker spends at least ten hours per week doing work away from the office, including while moving) (International Labour Organization, 2016).

Regardless of the type of teleworking, there are at least four general characteristics applicable. First, the use of technology for working (Orlando Ardia, 2015). The essence of a teleworker is the capacity to do the job through any technology, which means jobs that require personal contact or manual activities are excluded. Second, the teleworker is not located in the employer’s office but still has access to the required documents or information to perform the job. Considering any of the classifications of the types of telework based on the places the teleworker

performs the job, the common aspect is that it is not in the employer's regular office or location. The third characteristic is flexibility in time management. Teleworking demands flexibility in time management because its purpose relies on that condition, allowing the teleworker having greater control of their life. Fourth, teleworkers require a result-oriented evaluation (Orlando Ardia, 2015). The classic subordination where the employer has the power to supervise the entire performance of the worker is challenged by teleworking, where evaluation is based on results instead of the performance in every working hour.

1.3. International Teleworking

Teleworking responds to and integrates the characteristics of the 21st century, an era of technology, innovation, social media, and data richness; which is why it allows for new ways of being, feeling, performing and relating (Bustos Ordoñez, 2013). This new, broader and more complex understanding of the world and, consequently, the world of work, is supported by internet-based ICTs, and can be carried out practically from any place and at any time (Eurofound and the International Labour Office, 2017), allowing for the existence of international teleworking.

The development of far-reaching advances in ICTs has enabled workers to remain connected to and closely interacting with co-workers at the employer's regular office from any other location (International Labour Organization, 2016), including across state borders. In that sense, the "new spatial independence has transformed the role of technology in the work environment, offering both new opportunities and new challenges" (Eurofound and the International Labour Office, 2017, p. 1).

International teleworking is far from being easy to regulate or having a response to every unclear situation. It raises several questions and challenges; such as which country's labour and taxation laws should be used –the one where the employer is based or the one where the job is being done; how should collective rights be understood (e.g. freedom of association, collective

bargaining and strike), considering that teleworkers are often dispersed across countries (International Labour Organization, 2016); how Human Resources management should make teleworkers feel part of the organization as much as the non-teleworking workforce; how the inspection system should work, how employers' obligations regarding occupational safety in the workplace can be demanded and enforced by international teleworkers, among others.

1.4. Decent Work

The International Labour Organization (ILO) is the specialized agency of the United Nations (UN) whose objectives are the establishment of fundamental labour standards, the promotion of social justice, the improvement of working conditions, and the creation of job opportunities (Larion, 2013).

In June 2008, the ILO adopted the *Declaration on Social Justice for a Fair Globalization*, which constitutes the third major statement of policies and principles adopted by the International Labour Conference (after the *Philadelphia Declaration* of 1944 and the *Declaration on Fundamental Principles and Rights at Work* of 1998). This *Declaration* focuses on globalization (International Labour Conference, 2008), but it is also a statement that recognizes the concept of “decent work” developed by the ILO in 1999 (Larion, 2013).

“Decent work” is a concept that relates to “productive work in conditions of freedom, equity, security and human dignity” (International Labour Office - Evaluation Unit, 2014, p. 1). Moreover, “decent work” is a recognition of our humanity above our position as workers, and it seeks to achieve conditions where work is a safe and reasonable means to develop people's capacities and well-being:

Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of

opportunity and treatment for all women and men (International Labour Organization, 2015).

The concept of decent work gained importance in 2008, when the UN Millennium Development Goals (MDG) were expanded with the addition of the new aim to “achieve full and productive employment and decent work for all including women and young people” (United Nations, 2015, p. 17). However, this target was limited to the goal of eradicating extreme poverty and hunger. The term acquired significant importance when in 2015 it was added as a specific goal (Number 8) among the 17 Sustainable Development Goals (SDG), which was to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” (United Nations, 2015, p. 23). Furthermore, vital aspects of decent work are rooted in and/or connected with other targets of several other MDGs. In particular, as will be discussed later in this thesis, decent work has a close relation with Goal 3, which seeks to “ensure healthy lives and promote well-being for all at all ages” (United Nations, 2015, p. 50).

1.5. Principles of Decent Work

In the *Declaration on Social Justice for a Fair Globalization*, there are four strategic pillars of the Decent Work Agenda structured by the ILO. They are: (1) Labour standards and rights at work; (2) Employment creation and enterprise development; (3) Social protection; and (4) Promotion of social dialogue (tripartism). These four objectives of the Decent Work Agenda “are inseparable, interrelated and mutually supportive. The failure to promote any one of them would harm progress towards the others” (International Labour Conference, 2008).

Considering the ILO *Declaration on Social Justice for a Fair Globalization*, the main content of the principles can be summarized in the following manner (International Labour Conference, 2008):

- (1) Labour standards and rights at work: This pillar refers to the fundamental principles that must structure the world of work. In particular, there is a special focus on the freedom of association and the right to collective bargaining.
- (2) Employment creation and enterprise development: Decent work requires a sustainable and economic environment where people can be productive not only for the employers' benefit, but also for their personal fulfillment and well-being. Furthermore, enterprises and society should pursue economic growth together with social progress.
- (3) Social security and labour protection: Decent work demands social security, minimum wage, and healthy and safe working conditions for everyone.
- (4) Promotion of social dialogue (tripartism): This principle refers to social dialogue as necessary for a guarantee of decent work. Through it, labour law, policies, and regulations can be adapted and implemented to diverse realities and countries.

1.6. ILO Decent Work Indicators

Over the last decade, the ILO has made significant efforts to establish decent work indicators. The reason to achieve this goal has been “to transform the Decent Work Agenda from a political ambition into something more concrete and quantifiable” (International Labour Organization, 2009). Four dates are important to mention in this development.

First, in September 2008, the ILO arranged an international Tripartite Meeting of Experts (TME) on the Measurement of Decent Work. They adopted a framework of Decent Work Indicators –which are both Statistical and Legal Framework indicators. The purpose of having this measurement framework was mainly to assist state members to assess progress towards decent work and to offer comparable information for analysis and policy development (Rogovsky, 2012). Moreover, the indicators allow for greater transparency of information, which contributes to improved policy accountability (International Labour Organization, 2008).

There is no doubt the measurement of work conditions is a complex task, considering its multifaceted nature (International Labour Organization, 2008). Since the TME wanted to capture this essence with a multidimensional view, the four principles of decent work mentioned above were left aside for a second approach, in which the indicators corresponded to “substantive elements of decent work” (International Labour Organization, 2008, p. 18).

There are ten so-called “substantive elements” or thematic areas of decent work, which all seek to encompass the four principles or strategic goals; Table 1 below shows under which strategic objectives each substantive element falls, considering they are related and mutually supported (International Labour Organization, 2008):

Table 1 Connection between the Thematic Areas and Principles of Decent Work. Own Elaboration.

| No. | Thematic areas of decent work | (1) Labour standards and rights at work | (2) Employment creation and enterprise development | (3) Social protection | (4) Promotion of social dialogue |
|-----|---|--|---|--------------------------|-------------------------------------|
| 1 | Employment opportunities | x | x | | |
| 2 | Adequate earnings and productive work | x | | x | |
| 3 | Decent working time (hours) | x | | x | |
| 4 | Combining work, family and personal life | x | | x | |
| 5 | Work that should be abolished | x | | x | |
| 6 | Stability and security of work | x | x | x | |
| 7 | Equal opportunity and treatment in employment | x | x | x | |
| 8 | Safe work environment | x | | x | |
| 9 | Social security | x | | x | |
| 10 | Social dialogue, workers' and employers' representation | x | | | x |

Second, in December 2008, the 18th International Conference of Labour Statisticians was held. During this Conference, Resolution IV (“Resolution concerning further work on the measurement of decent work”) was approved. In it, the previous framework of Decent Work Indicators developed by the TME was recognized, more development was encouraged, and a full

report on progress and outcomes was decided on to be prepared by the 19th International Conference (International Labour Organization, 2009).

Third, in 2013, the ILO issued a second –and so far, the latest– version of the *Manual of Decent Work Indicators*. The principal contribution of this *Manual* was several enhancements and additions, which seek to provide a better tool for analyzing the many dimensions of Decent Work at the country level (International Labour Organization, 2013). The same year, the 19th International Conference of Labour Statisticians was held (whose Report was issued in January 2014). In the Report, a new “substantive element” was added (Economic and Social Context for Decent Work), increasing the list to eleven substantive elements of decent work; and new indicators were also added, such as green jobs and environmental sustainability (International Labour Organization, 2014).

Fourth and finally, in 2018, the 20th International Conference of Labour Statisticians was held (Report issued in January 2019). The Report contains the assessment of concepts, statistical definitions, and measurement methods of topics relevant for decent work; and adopts for the first time the SDGs’ indicators on rights (International Labour Organization, 2019).

These four efforts, that had been developed over the years by the ILO, are part of the organization’s efforts to not limit itself as a knowledge-based organization, but to also start consolidating “its position as the world reference on labour statistics, and as the main repository of timely data on decent work” (Diez de Medina, 2018). In that sense, since the importance of accurate data is the lifeblood of policy making, every work in this direction is laudable because it helps improving policy advocacy by using empirical evidence.

1.7. Workers' Well-being

Formerly, the main and usually only indicator regarding work was productivity. This idea evolved and the human rights approach made clear the importance of developing a much more complex indicator system that would help identify workers' well-being.

Well-being has shifted from the idea of “being well” to being considered “a measure of global interest that must be included in the analysis of human development” (Sánchez-García, Vargas-Morúa, & Hernández-Sánchez, 2018, p. 2). It is a vital constituent of quality of life and is the product of the individuals' cognitive and affective evaluation of living conditions, experiences, preferences, opportunities and adaptations (Brulé & Maggino, 2017). The importance of well-being is recognized by governments, global forums, and international organizations and programs (Sánchez-García, Vargas-Morúa, & Hernández-Sánchez, 2018).

Human work has a strong social dimension, because it provides economic resources, but also allows the integration into society, creating personal fulfillment (Ariza-Montes, Giorgi, Hernández-Perlines, & Fiz-Perez, 2019). This means that the quality of work life is a vital element of quality of life in general. The fact that we spend a substantial portion of our lives working means that our personal life (from personal and family relationships to our own mental and physical health outside of work) is shaped by our experience at work and our income. In other words, work represents a fundamental determinant of our overall well-being (Measure What Matters, 2016).

As it was previously mentioned in this study, “decent work” and “well-being” find their intersection in their recognition as Sustainable Development Goals. The connection between decent work and well-being is relevant because when aiming for sustainable development, both have to be present. Particularly, nurturing workers' well-being is an economic and social imperative and constitutes a precondition to achieving decent work (Goal 8), as well as contributing towards an improvement of health and well-being (Goal 3) (Measure What Matters, 2016).

Despite its importance, workers' well-being is hardly ever treated as an integral element of sustainable development and has had little traction within frameworks designed to observe and report its social progress (Measure What Matters, 2016).

Chapter 2 – Measuring Teleworkers' Well-being

In this chapter we explore the specific indicators applied by the ILO when dealing with decent work; more specifically, how they measure well-being, and second, how teleworkers' well-being is currently measured.

2.1. Measuring Workers' Well-being

In the ILO *Declaration on Social Justice for a Fair Globalization*, it is said that member States may consider “the establishment of appropriate indicators or statistics, if necessary, with the assistance of the ILO, to monitor and evaluate progress made” (International Labour Conference, 2008, p. 14), which is why the ILO has, over the years, developed an evolving framework for measuring decent work.

One conclusion formulated by the ILO in its research has been that the measurement of decent work cannot be assessed by standard numerical indicators alone (International Labour Organization, 2008). Some aspects, like income or working time can be perceived as an easier variable for the use of statistical measurement. Nevertheless, since work has a strong social dimension and has to be evaluated considering the international labour standards, it is necessary to consider complex factors to assess the reality, which demands qualitative information. Well-being indicators are not exempt from this necessity, requiring mostly qualitative methods of data collection.

Indeed, workers' well-being refers to the overall quality of workers' life experience and functioning at work, which is a “multidimensional and context dependent concept” (Adegbite, 2019). In that sense, the reality of present society indicates that the three essential aspects when measuring employees' well-being are the psychological aspect (eudaemonic and hedonic), the physical aspect (composed by benefits, healthcare, injuries, among others), and the social aspect

(social-support, security of life and property, trust, etc.) (Adegbite, 2019). In other words, to measure workers' well-being, an analysis needs to be comprehensive, covering all these aspects of working life.

2.2. Workers' Well-being Indicators

There have been several studies which set out to identify the specific indicators of workers' well-being. Bamberry states that the factors that impact well-being positively are the management of workload intensity and control, the availability of quality clinical supervision, and access to employee assistance programs and supportive management structures (Bamberry, Cummings, Roberts, & Rossiter, 2019). Haepf mentions that some factors, such as teleworking, overtime compensation, and performance bonuses improve workers' both physical and psychological well-being (Haepf, 2019). Moreover, an abundance of evidence supports the claim that well-being is dependent on family relationships, health, social status, and employment circumstances (Clark, Frijters, & Shields, 2008), and that it is strongly associated with wealth and financial status (Abreu, Oner, Brouwer, & Van Leeuwen, 2019). Abreu et al. emphasize the role of independence, psychological income, and job satisfaction, as strong indicators of workers' well-being (Abreu, Oner, Brouwer, & Van Leeuwen, 2019).

At the same time, among the indicators of lower well-being we can mention toxic workplace cultures and stress from client interaction, which are considered major threats to work satisfaction by both management and unions (Bamberry, Cummings, Roberts, & Rossiter, 2019). Other indicators of poor well-being in the workplace are individual disengagement, high absenteeism rates, and professional exhaustion, together with the loss of the meaning of work, which includes the analysis of absenteeism, presenteeism, psychological distress, satisfaction at work, engagement, and musculoskeletal disorders (Parent-Lamarche & Marchand, 2019). Indicators of physical environment include working time quality, work intensity, skills and

development, social environment, emotional intelligence, self-efficacy and resilience, and other work-specific variables such as decision authority, irregular schedule, skill utilization, physical demands, number of working hours, job (in)security, job promotion, psychological demands, and social support from colleagues and supervisors (Parent-Lamarche & Marchand, 2019).

Going deeper into the human rights approach, closely related to the decent work approach, in Table 2 we summarize the main statistical and legal framework indicators. The information in the table shows that considering the eleven thematic areas of decent work, there are specific factors which are expected to be identified in order to measure progress towards decent work. Our main findings are the following:

- None of the thematic areas of decent work focus on the workers' well-being. However, since workers' well-being is a substantial and extensive concept, interconnected with several thematic areas of decent work, there is no specific need of including well-being as a thematic area, but it is urgent to at least recognize its importance in the process of achieving decent work for all.
- There is no specific indicator of well-being. None of the thematic areas of decent work, including the ones most related to the social dimension of work (Principle 3 of decent work) contain a specific indicator of the workers' well-being. This absence can be explained if we accept that well-being covers a significant set of other indicators, but its omission reveals the need for a further understanding of well-being through a lens of decent work.
- When analyzing the reasoning behind the ILO decent work measurement, we identify only three occasions where the concept of well-being appears.
 - The first instance is in the Legal Framework Indicator of "Maximum hours of work". Indeed, the ILO established that "the aim of limiting hours of work is to preserve the workers' health and well-being and to ensure their productiveness and motivation" (International Labour Organization, 2013, p. 104).

- The second occasion is in the Legal Framework Indicator of “Paid annual leave”.

The ILO limits its reasoning by using the same wording than in the previous indicator, stating that “the aim of annual leave is to preserve workers’ health and well-being and ensuring their productiveness and motivation” (International Labour Organization, 2013, p. 105).

- The third occasion is related to the Statistical Indicator of “Poverty measures”.

According to the ILO, these measures are intended to provide information only on monetary well-being; but recognizes that, in general, poverty is not just about insufficient income, but also includes other aspects of well-being such as powerlessness, health, literacy, nutrition, and insecurity (International Labour Organization, 2013).

- There are two other occasions when the ILO uses the concept of well-being, but only for the purpose of clarifying its limitations, and to mention what it is not considered to be related to it. First, in the Statistical Indicator of “Earnings inequality”. Since earnings are not the total income of a person, this indicator “should not be taken as a measure of relative well-being per se, but understood as contributing to overall income inequality employee” (International Labour Organization, 2013, p. 237). Second, in the Statistical Indicator of “Real GDP per capita”. In this case the concept of well-being is used to dispel the common confusion of believing that real GDP should be treated as if it were a measure of economic well-being, which constitutes a misinterpretation because that indicator does not measure economic well-being (International Labour Organization, 2013).

Table 2 ILO Decent Work Agenda Main Indicators.

Indicators listed in *blue* are the ones justified with the concept of well-being.

Own elaboration based on the Concept Paper No. 6 prepared by the International Cooperation and Development – European Commission (International Cooperation and Development, 2018).

| No. | Thematic Areas of Decent Work | Statistical Indicator | Legal Framework Indicator |
|-----|---|--|---|
| 1 | Employment opportunities | <ul style="list-style-type: none"> • Employment-to-population ratio, 15–64 years • Unemployment rate • Youth not in education and not in employment, 15–24 years • Informal employment • Labour force participation rate, 15–64 years¹ | <ul style="list-style-type: none"> • Government commitment to full employment • Unemployment insurance |
| 2 | Adequate earnings and productive work | <ul style="list-style-type: none"> • Working poor • Low pay rate (below $\frac{2}{3}$ of median hourly earnings) • Average real wages² | <ul style="list-style-type: none"> • Minimum wage |
| 3 | Decent working time (hours) | <ul style="list-style-type: none"> • Excessive hours (more than 48 hours per week; ‘usual’ hours) • Paid annual leave³ | <ul style="list-style-type: none"> • <i>Maximum hours of work</i> • <i>Paid annual leave</i> |
| 4 | Combining work, family and personal life | <p>Currently, there are not statistical indicators. For a future inclusion, two indicators are candidates:</p> <ul style="list-style-type: none"> • Asocial/unusual hours • Maternity protection | <ul style="list-style-type: none"> • Maternity leave (including weeks of leave, and rate of benefits) • Parental leave |
| 5 | Work that should be abolished | <ul style="list-style-type: none"> • Child labour | <ul style="list-style-type: none"> • Child labour (including public policies to combat it) • Forced labour (including public policies to combat it) |
| 6 | Stability and security of work | <ul style="list-style-type: none"> • Precarious employment rate | <ul style="list-style-type: none"> • Termination of employment (including notice of termination in weeks) |
| 7 | Equal opportunity and treatment in employment | <ul style="list-style-type: none"> • Occupational segregation by sex • Female share of employment in senior and middle management | <ul style="list-style-type: none"> • Equal opportunity and treatment |

¹ This statistical indicator is considered not a main one, but an ‘additional’ decent work indicator (International Cooperation and Development, 2018).

² This statistical indicator is considered not a main one, but an ‘additional’ decent work indicator (International Cooperation and Development, 2018).

³ This statistical indicator is considered a ‘candidate for future inclusion/developmental work to be done by the ILO Office’ (International Cooperation and Development, 2018).

| | | | |
|----|---|--|---|
| | | <ul style="list-style-type: none"> • Gender wage gap⁴ • Indicator for fundamental principles and rights at work (Elimination of discrimination in respect of employment and occupation) to be developed by the ILO Office⁵ • Measure for discrimination by race/ethnicity/of indigenous people/of (recent) migrant workers/of rural workers where relevant and available at the national level⁶ • Measure of dispersion for sectoral/occupational distribution of (recent) migrant workers⁷ • Measure for employment of persons with disabilities⁸ | <ul style="list-style-type: none"> • Equal remuneration of men and women for work of equal value |
| 8 | Safe work environment | <ul style="list-style-type: none"> • Occupational injury rate, fatal | <ul style="list-style-type: none"> • Employment injury benefits • Safety and health labour inspection |
| 9 | Social security | <ul style="list-style-type: none"> • Share of population aged 65 and above benefiting from a pension • Public social security expenditure (% of GDP) | <ul style="list-style-type: none"> • Pension • Incapacity for work due to sickness/sick leave • Incapacity for work due to invalidity |
| 10 | Social dialogue, workers' and employers' representation | <ul style="list-style-type: none"> • Union density rate • Enterprises belonging to employer organization rate • Collective bargaining coverage rate • Indicator for fundamental principles and rights at work (freedom of association and collective bargaining) to be developed by the ILO Office | <ul style="list-style-type: none"> • Freedom of association and the right to organize • Collective bargaining right • Tripartite consultations |
| 11 | Economic and social context for decent work | <ul style="list-style-type: none"> • Labour productivity • Income inequality • Inflation rate • Wage/earnings inequality • Poverty measures | <ul style="list-style-type: none"> • Labour administration |

⁴ This statistical indicator is considered not a main one, but an “additional” decent work indicator (International Cooperation and Development, 2018).

⁵ This statistical indicator is considered not a main one, but an “additional” decent work indicator (International Cooperation and Development, 2018).

⁶ This statistical indicator is considered not a main one, but an “additional” decent work indicator (International Cooperation and Development, 2018).

⁷ This statistical indicator is considered a “candidate for future inclusion/developmental work to be done by the ILO Office” (International Cooperation and Development, 2018).

⁸ This statistical indicator is considered a “candidate for future inclusion/developmental work to be done by the ILO Office” (International Cooperation and Development, 2018).

2.3. Teleworkers' Well-being Measurement: European Working Conditions Survey 2015 (EWCS)

The ILO and the European Foundation for the Improvement of Living and Working Conditions (Eurofound)⁹ published a joint research report in 2017 in which they sought to identify the impact of teleworking on the world of work (Eurofound and the International Labour Office, 2017). The research implies a lack of a consistent and global frameworks regarding working conditions of teleworkers but recognizes the existence of national studies and validates the data of the sixth European Working Conditions Survey from 2015 (EWCS).

Considering that this is the latest report from the ILO, the institution which launched the term “decent work” and “workers’ well-being”, it represents the current position of how to treat well-being measurement regarding teleworking. Especially because an standard expert questionnaire on teleworkers and its effects, used in the sixth EWCS, was jointly developed by Eurofound and the ILO in 2015 (Eurofound and the International Labour Office, 2017), developed after the release of the decent work indicators discussed previously.

The EWCS 2015 synthesizes the research carried out in ten EU Member States¹⁰, and its five objectives are:

- (i) To measure working conditions across European countries on a harmonized basis;
- (ii) to analyze relationships between different aspects of working conditions;
- (iii) to identify groups at risks and issues of concern, as well as areas of progress;
- (iv) to monitor trends over time; and
- (v) to contribute to European policy development, in particular on quality of work and employment issues (Eurofound and the International Labour Office, 2017, p. 6).

⁹ The Eurofound is a “tripartite European Union Agency, whose role is to provide knowledge to assist in the development of better social, employment and work-related policies” (European Foundation for the Improvement of Living and Working Conditions, 2019).

¹⁰ Belgium, Finland, France, Germany, Hungary, Italy, the Netherlands, Spain, Sweden, and the United Kingdom.

The conclusions identified by the EWCS 2015 concerning teleworking were limited to: (i) general data on telework (the types of telework using mobiles or computers, the amount of time workers telework per week, the countries with higher number of teleworkers, and the sector and level of education where teleworkers are mostly found), and (ii) certain working conditions identified when teleworking (namely, time flexibility and autonomy and work-life balance) (Eurofound, 2017).

However, if we examine not only the conclusions but also the associations between teleworkers, working time, work-life balance, and health and well-being that are part of the data of the EWCS 2015, we obtain four sections of the questionnaire that extend the notion of well-being for teleworkers. Table 3 details each section and its connection to teleworkers' well-being.

Table 3 Linking Sections of the Questionnaire of the EWCS 2015 with factors of Teleworkers' Well-being. Own Elaboration

| No. | Section of the Questionnaire of the EWCS 2015 | Connection to Teleworkers' Well-being |
|-----|---|---|
| 1 | Your experience stress in your work | Health / Number of working hours |
| 2 | Sleep scale | Health / Number of working hours |
| 3 | Work affects health negatively | Health / Number of working hours |
| 4 | How do your working hours fit in with your family or social commitments outside work? | Number of working hours / work-life balance |

Certainly, if we review the EWCS 2015 considering all workers, and not just teleworkers, the indicators used for identifying well-being are more. In fact, there is a connection between job quality indices (including work time quality, work intensity, social environment, skills and discretion, prospects and physical environment) and well-being indicators. The well-being indicators considered are detailed in Table 4.

Table 4 *Well-being Indicators and Definitions based on the Sixth European Working Conditions Survey – Overview Report (2017 update). Own Elaboration.*

| No. | Well-being Indicators | Definition |
|-----|---------------------------|--|
| 1 | Subjective well-being | Measured through the World Health Organization's Well-Being Index (WHO-5), which assesses three aspects: positive mood, vitality and general interest in things (Topp, Østergaard, Søndergaard, & Bech, 2015). |
| 2 | Number of health problems | Based on calculation of workers' health issues. |
| 3 | Work-life balance | Subjective measure of the workers' own work-life balance. |
| 4 | Meaningful work | Based on questions relating to workers' perceptions of "doing useful work" and a "job well done". |
| 5 | Sustainable work | Based on questions around workers' assessment of their ability to work until the age of 60 and beyond. |
| 6 | Ability to make ends meet | Measure of one's finances. |
| 7 | Engagement | Based on questions on workers' relationship with their work. |

Considering the information above mentioned, our findings are the following:

- ILO, the organization responsible for setting the parameters regarding decent work, does not have a clear method for measuring workers' well-being. Consequently, there is no integrated approach for assessing teleworkers' well-being using decent work indicators.
- Considering this gap in the methods of measurement, we have to use the closest notion developed by a relevant entity. The joint research report published in 2017 by the ILO and the Eurofound give us an international approach to measuring teleworkers' well-being. In this report, the ILO based its analysis on the data provided by the sixth European Working Conditions Survey from 2015.
- The EWCS 2015 has seven well-being indicators, which are mostly limited to subjective and personal perceptions (with the exemption of the number of health problems), separating the concept of well-being from the objective working conditions, which are only considered under the indicator of "job quality". This separation precludes a comprehensive understanding of workers' well-being, which should be conceptualized in accordance with the decent work approach as we are going to analyze further in the next chapter.
- The measurement of well-being in the EWCS 2015 is analyzed using data pertaining to the entirety of all workers, but it does not contain a specific analysis of teleworkers' conditions.

In other words, they might have relevant data on the subject, but it was not processed by the organization in their final report.

- The report issued by the ILO and the Eurofound do have an assessment in teleworkers' well-being. However, in their approach, teleworkers' well-being is reduced to only two aspects: number of working hours and the possibility of having work-life balance. Although the recognition of objective measurement for identifying well-being is an improvement (compared to the only subjective approach of the EWCS 2015 report), it still lacks a more developed and substantial elaboration towards the goal of decent work.

Chapter 3 – Discussion

3.1. Assessing how Teleworkers' Well-being should be measured through the “Decent Work” Lens

As described in the previous chapter, well-being in the workplace is a crucial subject to address when dealing with decent work and well-being as Sustainable Development Goals. The intersection between these concepts demands a higher understanding of the complexity and importance of the human being in every aspect of their life, including their work environment.

In other words, it has become clear that “individual happiness and well-being depend on both private and working life, and mental health of the worker” (International Labour Organization, 2019). Since all these aspects are interconnected, the human rights approach calls for assessing the concept of well-being from an interdisciplinary and holistic view, taking into consideration not only perceptions and personal feelings, but also compliance with labour standards and individuals' health and work-related environmental, organizational, and psychosocial factors (International Labour Organization, 2019).

In the era of labour market deregulation, boundaryless careers, corporate restructuring, and ever more complex jobs (Shevchuk, Strebkov, & Davis, 2018), every aspect of the work environment can influence a worker's well-being. In the case of teleworkers, this issue should not be taken lightly either. On the contrary, teleworkers' well-being is as important as any other worker's. Even more so, because their physical absence in the employer's office can lead to the assumption that they have better work agreements than the rest of the workforce and therefore nothing to demand, complain about, or improve.

Considering our findings and the need for a better understanding of how teleworkers' well-being can be measured more comprehensively and aligned with the human rights approach, we compiled a set of conditions which we consider should be part of the areas to analyze when assessing teleworkers' well-being. The set of proposed conditions contains five main topics: Legal, Economic, Work, Health, and Social Conditions, considering that an assessment of well-being should include every aspect of human development, work, dignity, and happiness. In that sense, all these topics are interconnected, as proof of the complex phenomenon we are analyzing. Table 5 compiles the set of conditions proposed by us, with their respective indicators.

Table 5 Summary of Teleworkers' Well-being Indicators Through the Lens of Decent Work. Own Elaboration.

| No. | Areas | Indicators |
|-----|---------------------|--|
| 1 | Legal Conditions | <ul style="list-style-type: none"> Existence of specific regulations for teleworking (freedom of association, collective bargaining, employment injury insurance, safety and health labour inspection, labour administration and taxation). Recognition of labour rights for teleworkers (minimum wage, maximum hours of work, paid annual leave, maternity and paternity leave, notice of termination of employment, equal opportunity and treatment, equal remuneration for work of equal value, and social security rights). |
| 2 | Economic Conditions | <ul style="list-style-type: none"> Wages: low pay rate, average earnings in selected occupations and wages of non-teleworkers who perform equal work. Productivity: labour productivity, income inequality, wage/earnings inequality, inflation rate and poverty measures and education and skills development. |
| 3 | Work Conditions | <ul style="list-style-type: none"> Job satisfaction (job flexibility control, adequate technology, decent working time, collective rights' effectiveness, leadership and team support, human resources outreach, fair income and the possibility promotion opportunities, job stability and compliance with legal and social benefits and social security rights). |
| 4 | Health Conditions | <ul style="list-style-type: none"> Occupational health: occupational injury rate, including fatal injuries. Further debate is needed for teleworkers assessment. Mental health. Ergonomics. |
| 5 | Social Conditions | <ul style="list-style-type: none"> Work-life balance (asocial/unusual hours). Equality: gender-based (occupational segregation by sex, female share of employment in senior and middle management and gender wage gap), and non-discrimination (elimination of discrimination in respect of employment and occupation, measure for discrimination by race/ethnicity, as well as for indigenous people and people of (recent) migrant background and of rural workers where relevant and available at the national level; measure of dispersion for sectoral/occupational distribution of (recent) migrant workers, measure for employment of persons with disabilities and equality of opportunity and treatment for disabled men and women workers). Environmental sustainability. |

3.1.1. Legal Conditions: Regulations

Without rule of law, there is no functional society. Even less is it possible to achieve workers' well-being. An effective legal framework for labour is essential for decent work, because it helps protecting workers, workers' rights, and working conditions (Anker & Annycke, 2010). Information on the legal framework for achieving decent work should include information on laws, jurisprudence and ways of enforcement. Moreover, since the legal framework often allow to interpret statistical indicators, the regulations identified "should be transparent and verifiable; [they] need to be regularly updated and errors systematically eliminated" (International Labour Organization, 2008, p. 13).

There are no international labour entities or instruments specifically addressing teleworking. The closest are the Home Work Convention (No. 177) and the Home Work Recommendation (No. 184), both adopted by the International Labour Conference in 1996¹¹. The direct application of these instruments for teleworking is not unanimously accepted, not even for home-based telework. However, it does provide a set of provisions which can be reasonably used as minimum law parameters for teleworkers as well. These include: the right of homeworkers to be kept informed of their specific conditions of employment, hours of work, rest periods and leave, the protection of occupational safety and health, the application to homeworkers of national laws and regulations concerning minimum age for admission to employment, social security and maternity protection, the right of homeworkers to organize and bargain collectively, the fixing of minimum rates of wages for homeworkers, support for training, and other specifically targeted programs, and protection in case of termination of employment.

¹¹ Regional or national efforts for addressing the issue of telework are not included in this study, since our analysis focuses on teleworking from the global perspective of decent work and well-being.

The Decent Work Agenda emphasizes the rights of workers contained in its four principles, therefore assessing the legal conditions can help identify to what extent legislation protects such rights. Special attention goes to freedom of association and collective rights –which are laid down in ILO Conventions No. 87 and 98– since they are the fundamental for other working rights, too. In that sense, information on whether national laws guarantee freedom of association or whether trade unions are free from interference is important, even when workers choose not to join trade unions (Lee & McCann, 2008). This scenario is particularly important when dealing with teleworkers, considering they are often not visible in the work environment. However, this reality should not preclude the possibility to measure what is happening, in order to enable improvements.

When trying to measure legal conditions, the most common approach for global comparisons has been using the number of ratifications of ILO Conventions. However, constructing a measurement of how respected labour principles are, simply based on the number of ILO Convention ratifications, could introduce a significant error because that fact does not mean the actual implementation of the regulations (Lee & McCann, 2008) or the current status of those labour rights.

As shown in Table 4, currently there are several Legal Framework Indicators that are used to measure the progress towards decent work. Nevertheless, we claimed that those indicators should also be applied when measuring teleworkers' well-being, which means that they have to be reinterpreted in order to not only measure the minimum legal standards but also the specific aspects of teleworking; including controversial aspects which occur often with international teleworking, such as taxation, migration and labour inspection laws and regulations.

3.1.2. Economic Conditions: Wages and Productivity

Wages

Having a fair wage is without a doubt an indicator of well-being. However, as can be seen in Table 4, there are only two main indicators regarding this economic condition: “working poor” and “low pay rate”. “Working poor” refers to the number of poor people in the job market (International Labour Organization, 2008). Since teleworking is mostly reserved for managerial positions (Eurofound and the International Labour Office, 2017), this indicator does not seem to be relevant for assessing teleworkers’ well-being. On the other hand, the indicator of “low pay rate” refers to the “percentage of employed below one half of median hourly earnings, or absolute minimum, whichever is greater, by status in employment” (International Labour Organization, 2008, p. 36). For many people, the most important characteristic of work is the wages. Even the ILO, in the Preamble of its Constitution, recognizes the principle of an “adequate living wage”. In that context, the indicator of “low pay rate” does seem to be useful when assessing teleworkers’ well-being, because it would allow to identify the percentage of teleworkers with low payment, a situation that should be detected in order to be able to change it in the process of achieving decent work for all.

As any regular worker, teleworkers increase their well-being when they believe their salary is fair considering their qualifications and job performance. This appreciation can vary depending on personal work orientations. For example, a study has shown that people with higher income reported more well-being when they had a high level of external work orientations (i.e., caring more about income and social status), but lower well-being when they held high levels of internal work orientations (i.e., caring more about the actual outcomes of their job) (Malka & Chatman, 2003). However, regardless of personal priorities, there are objective ways to measure if a wage is fair –using, for example, the average earnings in selected occupations and the comparison with

wages of non-teleworkers that perform an equal work-. These indicators can help better understand the current status of well-being and decent work for teleworkers.

Productivity

The assessment of productivity matters not only for profits, but also because high productivity leads to a better development of enterprises, which, at the same time, improves the overall social conditions to improve workers' well-being. In that sense, we agreed with the indicators used to measure productivity (see Table 4, thematic area of "Economic and social context for decent work"), but we argued that their interpretation has to be expanded and connected with the concept of workers' well-being, which currently is not the case.

Indeed, there are five indicators of productivity in the assessment of decent work: labour productivity, income inequality, wage/earnings inequality, inflation rate, and poverty measures. Currently, only "poverty measures" contains in its reasoning the concept of "monetary well-being" (International Labour Organization, 2013). We claimed that this interpretation is too restricted and does not represent the importance of measuring workers' well-being in a comprehensive way. On the one hand, well-being is not just about insufficient salaries, and, on the other hand, well-being can be also identified when assessing the other indicators. The indicator of growth in "labour productivity" allows to analyze the increases in wages. The indicators of income inequality and wage-earning inequality are useful because, overall, social justice constitutes a prerequisite for stability, sustainable enterprise development, and economic growth; and the indicator of inflation is useful because high inflation erodes the purchasing power of wages and can make enterprises unviable. All these indicators describe the economic dimension of society at a certain time, including factors which directly affect workers' well-being.

Furthermore, we considered that an additional indicator should be part of this list, that is “education and skills development”, considering that capabilities and skills of workers are a significant determinant of productivity.

Finally, it is important to specify that since the indicators discussed under the name “productivity” are related to the economic and social context of society in general, we considered there is no need to have a specific assessment for teleworkers in this case, because the utility of these indicators lies precisely in its generality.

3.1.3. Work Conditions: Job Satisfaction

The area of work conditions is where we consider the need for a significant improvement when assessing teleworkers’ well-being through the decent work approach. As we can see in Table 4, there is only one theme related to work conditions, which is “Decent working time (hours)”. Even the name narrows down this indicator to a single issue of working time or working hours. Teleworking is a complex type of work that requires a much more nuanced analysis of work conditions. It requires a specific analysis of how teleworking characteristics mentioned in chapter 1, should be part of the assessment of job satisfaction which is closely related to workers’ well-being.

Hence, in the following paragraphs we detail the main factors related to teleworkers’ job satisfaction:

- **Having job flexibility control.** Studies have shown that whereas job flexibility control (in terms of personal autonomy, control over timing, location, and labour activities) does not affect the performance itself, it does significantly reduce work-family conflict, as well as career movement preparedness and turnover intentions (Kossek, Lautsch , & Eaton, 2009). Moreover, flexible hours give teleworkers a chance to handle family duties, schedule

appointments, or run errands, without losing a full day of work (International Labour Organization, 2013). Consequently, greater personal job flexibility control brings positive outcomes for teleworkers, which will improve their job satisfaction and therefore their well-being, too.

- **Having adequate technology (IT support system).** As every worker, teleworkers are responsible for completing their job assignments according to the terms agreed. Technology makes teleworking possible, which is why having, maintaining, and improving a proper IT system constitutes a variable that affects teleworkers' well-being. The impossibility of correctly performing a job because of technological shortcomings constitutes a risk in every work environment, and such issues significantly decrease job satisfaction for teleworkers, who rely completely on the IT support system for their work. Furthermore, with the use of technology, teleworkers have to deal more with cybersecurity issues (Yang, et al., 2013), and with the treatment and exposure of confidential information.
- **Having a clear time schedule (working time).** The fact that teleworkers are working from home or any other place, does not mean they have to be at employers' disposal without boundaries. One of the proven negative aspects of teleworking is the gradual disappearance of clear limits between working time and personal time. Mainly because managers might feel a loss of control over the teleworkers' performance, they "may begin to call workers at home or expect them to answer emails in the evenings and on weekends, for example" (Kossek, Lautsch, & Eaton, 2009, p. 6).

An empirical example of this situation was observed in Sweden, with public employees who teleworked 20% of their time to avoid moving to work and address parental demands. Researchers observed that for teleworkers, the home was still a place of stress caused by

labour relations: “Having a separate room for telework appeared to ameliorate spatial but not temporal or mental overlap of work and non-work life” (Hartig, Kylin, & Johansson, 2007, p. 231).

Having atypical and/or excessive hours of work, in any industry constitutes a threat to mental and physical health and often signals other work-related problems, such as inadequate hourly pay and the reduction of productivity (International Labour Organization, 2008). The importance of this factor is acknowledged by the ILO when it is considered the only indicator for assessing decent work as related to working conditions, and has prompted actions to deal with it, such as the development of the right to be disconnected (Eurofound and the International Labour Office, 2017).

- **Having the chance to create, and be members or not, of trade unions.** Freedom of association in the work environment is one of the fundamental aspects of work. Guaranteeing its existence offers the most democratic channel of communication between an employer and a worker. Teleworkers, even with the specific characteristics of their activities, are entitled to this freedom without interference.
- **Good leadership and team support.** Teleworkers face several challenges regarding teamwork. In that sense, managers can be concerned because reduced face-to-face communication can decrease interaction and make teamwork ineffective. Also, it might seem there is less managerial control over teleworkers and their performance (for example, considering home distractions) compared to regular workers, which can cause tension among the non-teleworkers (Irby, 2014) and create a hostile teamwork environment for teleworkers. In that context, managers and supervisors have a crucial role in developing new approaches to providing effective leadership and support to their team.

- **Human Resources outreach.** Human Resources departments are the ones in charge of dealing with the workforce in every organization: they oversee the selection and recruitment of new employees, the management and development of labour relations, the administration of employees' benefits, talent retention, and every aspect related to the human factor. Since their work is very important for improving workers' well-being, they face a challenge when dealing with teleworkers mainly because they do not have a physical presence in the organization. This situation becomes more complicated when dealing with international teleworking. Particular efforts developed by Human Resources departments to help teleworkers feel part of the organization and that all their concerns receive treatment and solutions just as the non-teleworkers', can influence their job satisfaction.
- Other factors that we include in work conditions and job satisfaction, are the ones related to every type of work, such as fair income and promotion opportunities, job stability and compliance with legal and social benefits and social security rights. The last two are also part of the assessment of decent work (see Table 4), but we argued that their inclusion omits the important connection with workers' well-being.

3.1.4. Health Conditions: Occupational Health, Mental Health, and Ergonomics

Occupational Health

Occupational health and safety regulations for the work environment have been undergoing further development in the last years. Whereas they used to be exclusively pertained to dangerous activities with fatal risks such as mining, agriculture, fishing and construction, it has

recently been extended to all kinds of work, with an analysis of risks in each field, depending on the kind of activities that are performed and the places of operation.

When collecting data, it is common to exclude teleworkers' occupational health (International Labour Organization, 2008). Indeed, occupational health conditions are often undervalued when dealing with teleworkers, under the idea that, since usually the work location is not the employer's office, then it is only the teleworkers' responsibility. The situation reveals its complexity even more when considering the flexibility in time management which teleworking offers, which can blur boundaries between cases when a situation is or is not a matter of occupational health. Regardless of the complexity of collecting this data, we argued that occupational health constitutes a significant factor for the measurement of teleworkers' well-being, and the reasons that make it hard to collect the information are the same reasons why workers need to have that data, so that it is possible to create, adapt and improve its reach.

Therefore, we approve of the use of the indicator "Occupational injury rate, fatal" (see Table 4), but we claimed that this indicator should be related to the concept of well-being, and that a debate should be opened among experts in order to evaluate the best way of assessing this factor in teleworkers' case.

Mental Health

Mental health should be part of the measurement of health conditions, and therefore of teleworkers' well-being. Since teleworkers often lack contact with colleagues, they can be at risk of isolation and losing the collective spirit which is developed in a work environment. Moreover, the importance of this indicator in well-being measurement is significant, since the collective union of workers is the first step in claiming labour rights. Hence, we claimed that in the thematic area of

‘Safe work environment’ listed in Table 4, the interpretation should be expanded in order to cover also mental health and create its respective indicator.

Additionally, it is worth mentioning another aspect related to mental health, which can also be categorized as a psychological condition, which is the indicator of “life satisfaction”. This indicator is related to the concept of quality of life, which comprises a number of social, environmental, psychological, and physical values (Theofilou, 2013). It generally includes objective living conditions, plus a high degree of subjective well-being. Also, it can be related to factors such as sleep, nutrition, leisure, etc. In this respect, life satisfaction is an indicator of well-being which is related to health conditions, which is, therefore, not only subjective or personal, but also relates to every aspect of a human life, not just waged labour. Based on the scope of this study, we consider that the indicator of “life satisfaction” should not be part of the assessment of teleworkers’ well-being, because it exceeds the goal of decent work analyzed in this research.

Ergonomics

Ergonomics is an applied science that aims to design and arrange the objects people use in their work environment (such as the furniture or equipment) so that they all interact most efficiently and safely. Mostly, ergonomics is included in occupational health; however, we considered reasonable to detail its importance for the case of teleworkers.

A teleworker can identify the development or progress of their well-being in comparison with their coworkers in case they face overcrowding, which is usually caused by a disproportion of workers and job positions. Yet, the problem teleworkers face is that since they generally do not have a place in the office, they appear to be invisible, and therefore the ergonomic risk factors are not considered during the performance of their jobs. In this sense, the reality of telework presents a challenge in how to address this issue considering the nature of this type of work.

3.1.5. Social Conditions: Work-life Balance, Equality and Environmental Sustainability

Work-life Balance

Work-life balance is a concept which seeks to identify an equilibrium between one's professional and personal life. Since teleworking provides greater flexibility (control over timing of work), it is widely acknowledged to benefit work-life balance. Furthermore, some studies recognize not only the improvement in work-life balance in teleworking (Giménez-Nadal, Molina, & Velilla, Telework, the Timing of Work, and Instantaneous Well-Being: Evidence from Time Use Data, 2018) but also recognize a negative relationship between work-family conflicts and teleworking (Gajendran & Harrison, 2007).

However, as any assumption, this can be disproven by empirical evidence, which is why work-life balance needs to be measured when referring to teleworkers' well-being. Hence, we drew attention to the importance of including statistical indicators in the near future into the assessment of teleworkers' well-being; particularly related to “asocial/unusual hours”.

Equality – Gender

Connected to work-life balance, a specific indicator regarding gender-based inequality is necessary for a human rights approach. Gender is a cross-cutting concern of the Decent Work Agenda, which means it is relevant to all facets of decent work (International Labour Organization, 2008).

Studies have found that telework contributes to a more equitable division of household responsibilities (Dockery & Bawa, 2017). A rights-based view would presume that teleworkers' well-being should increase in the presence of gender-equal home environment. However, it is still perceived that the work-life balance with teleworking may be more relevant for female workers, as

most of the housework continues to be carried out by women, even in developed countries (Giménez-Nadal & Molina, 2016).

Moreover, women teleworkers indicated a positive outcome regarding gender equality, which for them meant, among others, their ability to remain visible to managers, co-workers, and clients (Nakrosienė, Buciunienė, & Gostautaitė, 2019) when they chose teleworking because of family duties.

Therefore, we agreed with the main indicators (occupational segregation by sex, female share of employment in senior and middle management), and the additional indicator (gender wage gap), all listed in Table 4, in order to assess the equality in the process towards decent work but we claim that the interpretation of these indicators has to be specifically addressed when measuring teleworkers' well-being.

Equality – Non-discrimination

As shown in Table 4, currently there are no statistical indicators for any other discrimination except gender. This situation goes against the mandate of the ILO Convention No. 111, which establishes that discrimination is “any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation” (Article 1.1.a).

The ILO has already recognized this issue and has added two “additional” indicators (see Table 4): one regarding “the elimination of discrimination in respect of employment and occupation” (which is still being developed by the ILO); and the second, regarding the “measure for discrimination by race/ethnicity/of indigenous people/of (recent) migrant workers/of rural workers where relevant and available at the national level”. Furthermore, the ILO has proposed several indicators, which are candidates for future inclusion in the measurement of decent work,

such as the “measure of dispersion for sectoral/occupational distribution of (recent) migrant workers” and the “measure for employment of persons with disabilities” (International Cooperation and Development, 2018). However, this proposal fails to address equality of opportunity and treatment for disabled men and women workers because it limits the protection of people with disabilities to the measure of their rate of employment without considering the gender aspect.

We firmly support the addition of all indicators mentioned, because they would contribute to a better understanding of the social conditions of workers’ well-being. And, in particular, considering that telework is recognized as an alternative for people with disabilities (especially if they are deprived of their mobility), mothers at the stage of developing attachment with their children, the elderly who do not have access to job opportunities, and the youth. A set of indicators that allows the collection of data to evaluate these situations could contribute significantly to broader comprehension of teleworkers’ well-being.

Environmental sustainability

The last indicator we proposed is an important one of social welfare, and therefore of well-being, which is the understanding of the support to the macro-environmental system, which affects all human beings. Teleworking contributes to the care of the environment (Pérez Pérez, Martínez Sánchez , De Luis Carnicer, & Vela Jiménez), becoming a fundamental tool in the construction of sustainable cities by decreasing the activities that face-to-face work demands and therefore the carbon dioxide emissions that comes with it (for example, less use of public transport which decreases traffic and therefore time commuting and pollution).

Teleworking helps to reduce the magnitude of the ecological impact that our daily actions generate on the planet and to decrease the levels of sulfur, nitrogen, carbon monoxide and lead, emitted by automobiles (Suárez Barros, 2017).

Obviously, this aspect is also related to Health Conditions because caring for the environment would decrease the exposure to sickness related to it (like allergies or respiratory, ophthalmological, or dermal problems). Overall, teleworking appears to be a “green job” which increases well-being; which is why we argued that an indicator covering this aspect should be included when assessing the progress towards decent work for all.

Conclusion

Workers' well-being is an economic and social imperative and constitutes a precondition to achieving decent work. Teleworking is the manifestation of the evolution of work in an era ruled by technology and fast changes.

This study set out to determine how teleworkers' well-being should be measured, with consideration of the developed set of ILO decent work indicators. Previous attempts to assess teleworkers' well-being had been limited mostly to an equation of their well-being with the number of working hours and the possibility of having work-life balance (Eurofound and the International Labour Office, 2017); whereas others only considered their subjective well-being (such as the Eurofound's European Working Conditions Survey of 2015), omitting objective indicators.

Our research showed that the ILO does not have a clear method for measuring workers' well-being; consequently, there is no integrated approach for assessing teleworkers' well-being using decent work indicators. However, we argued that the ILO's decent work indicators can and should be interpreted in an extensive and more comprehensive manner so that all the special circumstances of teleworkers are considered when measuring their well-being at work.

To have an effective tool to extend the interpretation, we identified and proposed a set of five areas of teleworkers' well-being: Legal, Economic, Work, Health, and Social Conditions. We expect that our analysis of each of these conditions –with their respective indicators– will significantly contribute to a better measurement of teleworkers' well-being without rejecting or ignoring the decent work approach, which had already had a strong influence on the research and policy levels. After all, the fight for human rights should not create countless ineffective data collections, but an integrated and systematic one that serves policy making with effectiveness.

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