

REVISTA S&G

ISSN: 1980-5160



FLEXIBLE ARRANGEMENTS AS A TREND ON THE FUTURE OF WORK: A SYSTEMATIC LITERATURE REVIEW

Andrea Figueira

andreafigueira@id.uff.br Fluminense Federal University – UFF, Niterói, RJ, Brazil.

Stella Regina Reis da Costa

stellare@gmail.com Fluminense Federal University – UFF, Niterói, RJ, Brazil.

ABSTRACT

This research was developed before the world's society was taken by surprise by the coronavirus pandemic (COVID-19). This fact accelerated the need for most companies to adapt to the home office regime of their workforce. The trail left by the coronavirus is one of caution in the labor market and changes in the relationships between employers and employees. The purpose of this paper is to identify in the literature an overview of the evolution and trends of flexible work arrangements in companies and organizations over time. Data were gathered through an integrative literature review of articles published without regard to time constraints in the Scopus and Web of Science databases. The sample consisted of 562 studies, categorized and separated into periods longitudinally. We identified trending themes about the future of work, such as flexible work arrangements, a lack of labor legislation governing remote work, telecommuting as a tool for sustainability, and the effects of these new work arrangements on work-life balance. In addition, we also have issues that impact the management of people telecommuting. We did not search for theses and dissertations that address the theme, which could have provided even more recent results, but were beyond the scope of this research methodology. The coronavirus pandemic, which surprised the world, has had an impact on traditional work. Companies have had to implement remote work urgently, without planning or theoretical foundation. This study is relevant for companies and leaders dealing with flexible work arrangements. In the current pandemic, remote work has gained unimaginable proportions. Work relationships need to be adapted, and the management of this new modality has become a pressing need, and it is still being built for use by business leaders.

Keywords: Flexible Work Arrangements; Telecommuting; Home office.



Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675

INTRODUCTION

The nature of work is changing from traditional to non-traditional. According to Hynes (2014), these changes in the nature of work are more visible in developed societies and have as a major requirement the intellectual processing of information rather than the physical labor of the past. Traditional manufacturing work has shifted to developing countries. Knowledge workers need access to continuous flow to create information, and technological structures are not necessarily tied to a workplace or physical location to perform their activities.

Technological advances in information and communication contribute to this change in the nature of work and are fundamental to new forms of work. Different combinations of locations and times for certain modes of work depend on technology and are identified in the scientific literature, as are different names for the same definition.

Scientific studies on new forms of work present us with terms such as flexible work arrangements, new ways of working, and blended work as definitions for the conjunction of work arrangements that do not have a set time and place and that mix different arrangements, face-to-face and remote. Telework as part of these arrangements is a concept with various terminologies. According to Allen *et al.* (2015), there is a lack of a common definition that recognizes its variation in extent, relationship, and location. The diverging definition hinders synthesizing comprehensively the understanding of telework, and with this, surveys have different conclusions and divergent samples.

There is a consensus among the authors of telework literature reviews about the complexity of defining telework. For De Lorenzi Cancelier *et al.* (2017), this complexity of definitions is caused by the number of variables impacting flexible work practices, and telework is an alternative to flexible work. According to Belanger *et al.* (2013), the central limitation of research is the lack of theoretical grounding caused by the inherent complexity of the phenomenon. Moreover, telework symbolizes a huge change in the understanding of work and professional activities for individuals, organizations, and society.

Individual, social, and organizational demands are also factors contributing to adopting flexible work arrangements. Individuals seek greater flexibility and control over time and place of work that helps them balance work and life (Suh and Lee, 2017). Societies are attentive to environmental issues and sustainability to preserve the planet and human needs. In this sense, telecommuting is considered, in many studies, a sustainable travel demand management strategy (Kim, 2017)studies typically adopt one method of the following three: (1, and a government strategy for reducing ve-

hicle flow in large urban centers and, consequently, reducing pollutant emissions (Hynes, 2014). Organizations seek competitive advantages and implement policies to meet the demands of their human capital, the individual, and of social responsibility, the society. Therefore, retaining their strategic professionals is necessary to ensure their well-being since happy employees are the premise for a successful and sustainable company (Peisert, 2016).

Given the coronavirus pandemic (COVID-19), it is seen in the literature that the spread of telework, being a work practice contrary to the established social and cultural understandings of how work happens, encountered barriers to its implementation and dissemination. Leadership and managers seek to select who should or can telework as a form of control (Peter and Den Dulk, 2004), granting the modality only to employees in strategic positions. Recent research has addressed the following issues and concepts: who can telework; the benefits and drawbacks of using telepresence robots in telework at home; telework in regional post-disaster situations; the perceived proximity concept; and cyberslacking. These studies are grounded in a common definition of telework.

With society impacted by the pandemic, most companies have had the need to implement a home office for their workforce. This adoption, without planning and preparation, is a concern to experts. The scientific journal The Lancet reviewed the psychological impact of quarantine in different scientific databases and identified that most studies show negative psychological effects, post-traumatic stress symptoms, mental confusion, and anger. Some researchers suggest the effects are long-lasting. According to Brooks *et al.* (2020), companies should provide clear information about quarantine, such as protocols and the necessary tools. Moreover, they should remember the benefits of quarantine for society in general.

In this context, this research was developed prior to the pandemic, between 2019 and 2020, and aimed to identify the studies and trends on flexible work arrangements so that companies and their managers can make decisions for better work performance. Although the post-pandemic scenario is unknown, the results shown can be used in any time and environment and may be useful for future labor challenges in this new scenario.

This study is important for companies and organizations that intend to adopt flexible work arrangements because it serves as a theoretical foundation for their policies and strategies. In addition, it enables companies that have already adopted some type of arrangement to do so again, as it serves as a basis for reformulating and updating work trends based on scientific studies.



This systematic literature review primarily aims to identify and present an overview of the evolution and trends of telework over time.

METHODOLOGY

The method used to prepare this study was a bibliometric search in electronic databases. Publications were selected through the Portal de Periódicos da CAPES and the Scopus and Web of Science (WoS) databases, respectively, on 01.10.2019 and 03.23.2019, with no restriction on year of publication.

There were 727 articles found in the SCOPUS database on 10.01.2019 for the keyword "telework" and 2,438 articles for "home office". Graph 1 presents the telework publications by year in SCOPUS. The first publication was in 1977 and the number of publications started to rise in 1994, reaching its peak of publications in 2012 (51 publications).

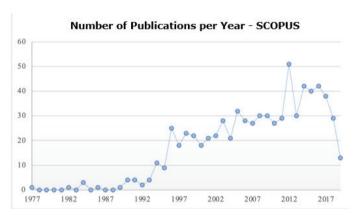


Figure 1. Telework publications per year in SCOPUS Source: Adapted from Scopus database by the authors (2020)

Figure 2 shows all the publications with the keywords telework and home office by field of knowledge. The areas with publications with the keyword "home office" are, in descending order, Social Sciences, Engineering, Medicine, and Computer Science. For telework, the order of publication of the areas is Social Sciences, Business and Administration, Computer Science, and Engineering. Telework is the most used keyword for Business and Administration, which is the macro theme of this study. The areas that study the topic the most are Social Sciences and Business and Administration.

To refine the initial search, filters limiting the types of sources and documents of publications to journal, article, article in press, and review were used, resulting in 481 publications.

Reading the 481 abstracts allowed us to classify the articles into 47 categories, eliminating the category classified as "other field of knowledge/no abstract". The classification of the articles points out the main objectives of scientific research, its evolution over time, the gaps in knowledge, and its relationship with the strategic management of people. With the exclusion of the category "other area of knowledge/no abstract", which totaled 57 publications outside the research context, the publications were reduced to 424.

Figure 3 presents the most researched themes by category (main theme), clipping the number of publications that appear between seven and 41 repetitions. We observe the category *"flexible work arrangements"* as a trend and as distinct categories: disabled, stress, cyberlaking, perceived proximity concept, and post-disaster.

Chart 1 presents the classification list of the articles into categories, the number of times of repetition, and their categorization over time. The longitudinal analysis was divided into four periods of the total publications found in the databases, without cuts.

Based on the above categorization, a new search was performed with the word "telework" in another database, Web of Science, on 03.232019. It identified 593 publications that were refined into only those classified as articles, reviews, and book reviews in the English and Portuguese languages, with DOI numbering, in the period from 2008 to 2019. Lastly, repeated publications were eliminated from SCOPUS. Thus, 81 publications remained.

Figure 4 presents the publications in the defined period without refinement. It can be seen that the peak of publications was in 2016, with 50 publications and subsequently only decreased.

Figure 5 shows the areas of knowledge with the largest number of publications on telework in the research period in descending order, which are: Management, Business, Applied Psychology, Ergonomics, Industry Labor Relations, Transportation among the areas with the highest percentages of incidence.

Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675

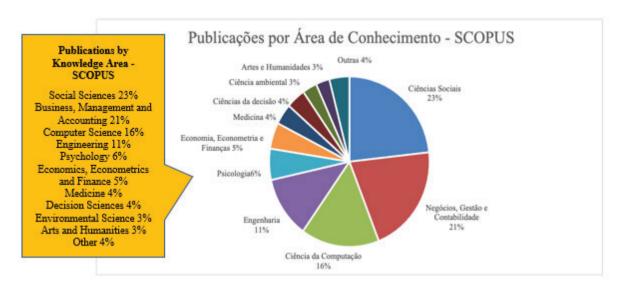


Figure 2. Telework publications by area of knowledge Source: Adapted by the authors from the Scopus database (2020).



Figure 3. Categorization of the publications on telework Source: Research data (2020)

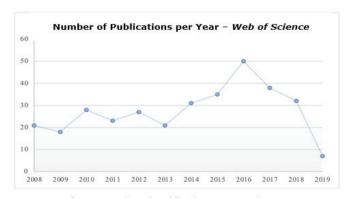


Figure 4. Telework publications per year in WoS Source: Adapted from WoS Database by the author (2020)

In this sense, the abstracts of the 81 articles were read for their subsequent categorization. Of the 47 categories identified in the SCOPUS research, 24 reappeared in the WoS research, and other categories were identified: new ways of working (NWW), blended working, and time use in teleworking. In addition, one article on gender studying men who work from home was identified; it was the only one identified in the surveys.

For people management in telework, a search was conducted on the concepts of strategic management of people related to telework. Of the 481 articles filtered and categorized on the theme "telework", seven articles were identified for the category "people management". To broaden the search with more scientific studies, another Boolean search

		Total (100%)	Periods			
	Category		1977 to 1989 (1%)	1990 to 2000 (20%)	2001 to 2010 (36%)	2011 to 2019 (43%)
1	Flexible working arrangements	41	-	9	11	21
2	Case Study (specific country or organization)	33	-	8	12	12
3	Increase or decrease / Future of teleworking	31	4	17	8	2
4	Effects of Telework (advantages, disadvantages, success)	26	-	3	10	13
5	Sustainability	26	-	6	8	12
6	Conflict between work and family on telework	20	-	4	7	9
7	Adoption/Implementation of telework	19	-	5	5	9
8	Control of teleworkers	17	-	4	6	7
9	IT/Media for Telework	14	-	4	6	4
10	Policies/regulations/laws	13	-	1	1	11
11	Leadership	13	-	1	7	5
12	Literature revision	13	-	2	6	5
13	Well-being/Job satisfaction	12	-	2	2	8
14	Disabled	12	-	3	5	4
15	Genre	11	-	2	4	5
16	Telework center/virtual offices	10	1	2	4	3
17	Telecommuting challenges	8	-	-	5	3
18	Stress	7	-	1	3	3
19	Selection of teleworkers	7	-	-	-	7
20	People management	7	-	-	6	1
21	Telecommuting concept	6	-	3	3	-
22	Social isolation	6	-	-	4	2
23	Specific professions in telework	6	-	-	4	2
24	Physical environment/teleworker health	5	-	-	4	1
25	Rural areas and telework	5	-	1	1	3
26	Knowledge management	5	-	1	1	1
27	Motivation to telework	5	-	-	3	1
28	Talent retention/Turnover	5	-	-	2	3
29	Teleworker behaviors and attitudes	4	-	-	-	4
30	Communication in Telework	4	-	-	3	1
31	Mutual cooperation between teleworkers	4	-	1	1	2
32	Performance	4	-	-	-	4
33	Smart work (tool)	3	-	-	-	3
34	Concept of Perceived Proximity	2	-	-	-	2
35	Trust in teleworking	2	-	1	-	1
36	Culture	2	_	-	1	1
37	Cyberlacking	2	_	_	-	2
	- I I I I I I I I I I I I I I I I I I I					-

Chart 1. Categorization of Telework publications from SCOPUS

Balance between personal life and teleworking

Telepresence

Training for teleworkers

Travel and teleworking

Coworking

Teleworker cost

Post-disaster

Telecommuting cost reduction

Information security

Virtual corporations

Source: Research data (2020)

Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675

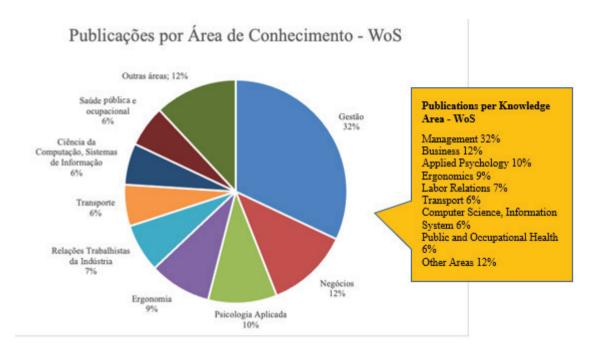


Figure 5. Telework publications per knowledge area - WoS Source: Adapted from SCOPUS database by the author (2020)

was conducted, now relating the words "Telework" and "Home Office" with "Human Resources Management". This search was made in the SCOPUS database where 22 publications were found, but after analysis, there were repeated publications, publications from another area of knowledge, and conference publications. Thus, 9 publications remained that, added to the 7 articles identified previously, totaled 16 articles.

ANALYSIS AND DISCUSSION OF THE RESULTS

From the categorization in **Figure 1**, it was possible to describe the evolution of research on telework in four periods: 1977 to 1989, 1990 to 2000, 2001 to 2010, and 2011 to 2019. For each period, the publications with the highest number of repetitions in the categorization were analyzed (for example, leadership and gender), as well as the articles with the highest number of citations regardless of the category. In addition, all relevant considerations were detailed in the periods.

Period from 1977 to 1989

The first publication on telework was authored by Harkness (1977) who evaluated the scenarios of decentralization of office activities to satellite centers, neighborhood centers, and work at home and how such decentralization could reduce urban transportation. Finally, he uses the term "tele-

work" as a potential for a considerable increase in the choice of residential locations for work.

Then, Nilles (1982) points to telework as the future of professional activities by providing increased productivity, worker satisfaction, and by making obsolete the long daily commutes to work. The other articles also aim to present telework as a form of work with a promising and successful future.

Dostal (1986) in turn, closes the period by stating that the growth of telework may not be very fast because social security systems do not allow new work patterns. Moreover, he recognizes that in a bad labor market situation, new forms of work can be used to avoid collective agreements and telework can bring new flexibility to our employment system.

Period from 1990 to 2000

This period remains dominated by studies on the prediction of telework and its increase or decrease as the first most researched category.

The second category with the most publications is "flexible work arrangements", where telework is studied as one of the developing work arrangements among the existing models of work organizations as an innovative way of ordering tasks. The article with the highest number of citations in this period on flexible work arrangements (Duxbury e Neufeld,

Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675



1999) developed an understanding of how telework arrangements affect intraorganizational communication, and the result suggests that, with some significant exceptions, part-time telework arrangements have little impact on intraorganizational communication.

The third most researched category is case studies, specifically company-specific cases.

The fourth category is sustainability, in which telecommuting is related to the decrease in vehicle traffic and the emission of pollutants. The triple bottom line, also known as the sustainability tripod, refers to the social, environmental, and financial capital of a partnership or business, and is also related to telework. The most cited article on telework in this period is about sustainability (Salomon, 1998) and analyzes the studies that indicate telework as a solution to social problems. In this sense, the results suggest an alternative approach that studies the issues related to human behavior in the context of technological change for the future.

Period from 2001 to 2010

Specific case studies are the categories with the largest number of studies in this period.

In second place are the studies on flexible work arrangements. A comparison is made between the different arrangements and the impact of each on organizations and the lives of professionals. Hill *et al.* (2003) paper, the most cited on flexible arrangements, looked at how three workplaces (traditional office, virtual office, and home office) influence aspects of the teleworker's work and personal and family life. The result suggests that the influence of the virtual office is more positive on work aspects than on personal and family life aspects. The influence of the home office seems to be mainly positive, and the influence of the traditional office is predominantly negative in aspects of work and personal life.

The third most researched category refers to the effects of telework, its benefits, and its drawbacks. The article with the highest number of citations in this category (Golden, 2007) studies the effects of telework on those professionals who remain in the office or the non-teleworkers in organizations where telework is present. The results suggest the need to consider telework's full range of impacts, including the potential adverse consequences for non-teleworkers.

The fourth position is occupied by two categories: predictions about telework and sustainability. Some studies analyze the reasons why telework did not grow as predicted in previous studies. According to Akyeampong (2007), contrary to expectations, growth during the 1990s was not sustained in the 2000s. The overall incidence remained unchanged

at about 10%, which suggests that the reasons for stagnation are unclear. In this sense, they may be partly because employees and employers reevaluate the advantages, disadvantages, and effectiveness of this type of work arrangement. Regarding sustainability, in this period, the studies maintain the same line relating telework to reducing pollutant emissions as in the previous period.

Period from 2011 to 2019

The last and most recent period consolidates the category of flexible work arrangements as the trend in telework studies, as it is the category with the highest number of occurrences. The studies compare the different types of flexible work arrangements, how they alter the physical and temporal boundaries around work, and the importance of managerial and organizational support for their adoption and effectiveness. The article with the highest number of citations on flexible work arrangements (Pyöriä, 2011) suggests that their diffusion has been a much slower process than anticipated for the following reasons: vital firms are concentrated in the largest growth centers, the absence of an established contractual framework and telework "culture", and finally, a lack of regional policy issues. Furthermore, it suggests that there are prospects for success in flexible work arrangements if those involved know what to expect and are prepared and trained to deal with problems and fears related to these arrangements. In this sense, flexible arrangements also need to be designed in compliance with national labor legislation, and this, part-time for most organizations, is the most advisable for organizations.

The second category with the highest frequency refers to the effects of telework benefits and drawbacks. They analyze how effective it is for organizations, its effects on employees' well-being, and the high expectations it raises versus the reality of its implementation.

In third place are two categories: case study and sustainability. Most studies on sustainability depict teleworking as a means to decrease energy consumption by reducing travel. It can also change the mobility pattern in major urban areas because decreasing the number of private cars will reduce pollutant emissions. Hynes (2014) conducted a study on telework policies in Ireland, and its result suggests that it remains untapped as an environmental tool and an advantageous economic and social option for the future.

The fourth category stands out in this period for presenting a considerable increase in the number of publications from previous years, namely: policies, regulations, and laws. Telework without regulation becomes a marginal practice (Hynes, 2014). Organizations that have related policies shape the communication flows of employees and man-



Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675

agers. In contrast, organizations that allow telework only by exception, that do not value it, and have no regulatory policies, generate different performances for teleworkers (Nordbäck *et al.*, 2017). The article on telework policies with the most citations (Lee and Hong, 2011) investigates organizations with structured policies and, as a result, suggests that employee satisfaction is significant, but performance is negative.

New categories have emerged in recent years: behavior, proximity concept, coworking, cyberslacking, performance, post-disaster, telework cost reduction, smart work.

Articles on the behavior and attitudes of teleworkers analyze the profile required for these professionals and how it influences their attitudes (Golden and Schoenleber, 2014), how eligibility and participation influence employee attitudes, and that different reasons for non-participation have impacts on behaviors and attitudes (Lee et Kim, 2018).

The concept of perceived proximity is related to telework as a means of measuring the quality of relationships and their outcomes in organizations. The results show that perceived proximity (a cognitive and affective sense of relational closeness) rather than physical proximity (geographical proximity measured in kilometers or miles) affects the relationship quality of teleworkers (O'leary et al., 2014).

Coworking is a new way of thinking about the work environment, sharing space with office resources, which brings together self-employed professionals from various areas and companies in a single location, including teleworkers (Bueno *et al.*, 2018).

Cyberslacking is the concept of counterproductive behaviors associated with the internet use for non-work-related purposes and company time. The study by O'neill *et al.* (2014) suggests that teleworker personality may be a way to identify those who may be selected for remote work or to aid the development of processes that reduce cyberslacking opportunities, such as closer managerial monitoring of employees' daily output.

Performance measurement and telework performance is a category of research that has emerged only in recent years. They propose indicators and the study result is that there is increased value in performance (Arso *et al.*, 2018). Teleworker job performance is an ongoing issue of public debate. According to Golden *et al.* (2018), the findings of the studies did not support negative associations between telework and performance. Further investigation into the extent of telework and its nature is suggested.

The post-disaster category refers to natural disasters that interfere with the nature of work and promote a review as

to where work is performed. Donnelly *et al.* (2015) present telework as a form of work for regional post-disaster situations, promoting a means of ensuring continuity of operations in an emergency situation.

In the category of cost reduction by teleworking, Tedeev (2014) shows that one of the most effective ways to increase business profitability and company capitalization is by using new forms and methods for employee management. Despite the developed legislative regulations, many problems remain unresolved. As a result, teleworkers' labor rights protection standards are decreasing compared to ordinary workers.

Finally, the smart work category refers to a teleworker management tool used by companies. The articles identify the challenges faced by companies in developing and implementing a successful smart work program (Cha and Cha, 2014).

Management of people in teleworking regime

With the research of people management and teleworking literature, it is possible to understand the evolution and relationship of these themes. The first article relating telework to people management or human resources dates from 1993. Richter and Meshulam (1993) raise questions such as: what is the scenario at home?; what are the boundaries between home and work?; and how does the organization manage telework at home? The manager, the individual (teleworker), the family members, the organizational culture interfering in the manager and individuals, the work acting directly on the individuals, and the family culture interfering in the individuals and family members comprise the home scenario. The boundaries that telework needs to cross are related to the interposed transitions, when the work domain is invaded by the home domain and vice versa. Working from home eliminates geographical boundaries, so that work and home domains become one, and frequent interposed transitions are naturally incorporated into the daily routine.

In the early 2000s, the first articles appeared on the role of teleworker managers, such as the research of Pérez et al. (2002) that covered telework as an alternative way of organizing work by integrating two sources of competitive advantage: the human resources of the company itself and the new information and telecommunications technologies. They suggest that management occurs by integrating three management practices: technology management, innovation management (organizational change), and knowledge management.

In a study that considered transnational factors (different countries), Peters and Den Dulk (2004) focused their research on the question of under what conditions managers

Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675



grant the subordinate's request to telework. The result was that managers' decision-making is influenced by conditions related to an organizational context, employee characteristics, and the content of the individual request. National culture is the factor that globally impacts the whole process because government policies vary across national cultures.

The main question in Illegems and Verbeke (2004) study was what telecommuting means for management. They identified a knowledge gap in the studies, which is the lack of research that helps management understand whether the modality makes sense for the organization. There is a neglect of the effects on the human capital resource base of long-term organizations which are attracting, motivating, and retaining employees.

What changes in people management with telework? According to Taskin and Devos (2005), HR management should be seen as a new institution of individualization because the world is transferring regulatory functions to individuals themselves. The concept of individualization deals with the process that makes the individual more autonomous in the broad social context, also involving his relationship with work and organizations.

Salaff (2008) criticizes the social implications beyond the changing workplace. In this sense, in researching the factors of production, he observed how telework opens space for capital to enter an area previously private to individuals, their homes. His study identifies mechanisms by which telework extracts more from employees, their families, and their homes. Salaff further states that the last frontier becomes a factor of production through telework. In this way, capital enters the home, and teleworkers contribute money and time to production at home. Companies abandon hierarchical control and increase labor extraction.

In 2011, the first study linking telework with sustainability and people management was identified. Rietveld (2011) describes it as a "green" innovation that was overrated as a solution to sustainability problems.

The first article on teleworking as a flexible work arrangement that may involve family conflict and must be managed by the organization appeared in 2014. Higgins *et al.* (2014) researched how these arrangements involve the individual's home and analyzed work-family or family-work conflicts in four types of flexible work arrangements (the traditional work arrangement, compressed work weeks, flex time, and telework). Conceptually, work-family conflict is bidirectional, and researchers make a distinction between work-family and family-work conflicts. When work responsibilities negatively affect the ability to complete family responsibilities negatively affect the ability to fulfill work obligations, it

is called a "family-work conflict".

Peisert (2016) considers that employee care is ubiquitous in telework. His research sought inputs on employee engagement and retention from the scientific literature to assist HR managers in providing the necessary care to employees. In addition, he points to the leadership style of organizations as a determinant of employee care in organizations. He proposes retention tools incorporated into organizations' strategic alignment and planning that can bring employee satisfaction. Peisert also suggests teleworking as the best way to provide support for employees with young children or who need to balance family life with work responsibilities by working part-time from home.

And how do effective "telemanagers" act and what are the main elements of this management? According to Beno's (2018) study on teleworker management, regular communication between manager and subordinate is the main element to reduce the negative impact of geographical distance. Feedback is included in the communication.

The most recent study on telework and people management presents new technology and its impacts on this relationship: the telepresence robot (TPR). It is a mobile remote presence device that allows two-way communication and interaction between a manager and the employees geographically separated. In order to study the effects of TPR implementation at work, Ipsen et al. (2019) studied this process in three phases: before, during, and after adoption. Afterward, he divided the results into positive and negative. The positives are that most managers perceive that the basic functionalities of TPR meet demands satisfactorily, provide the feeling of being present, and it is possible to see employees' reactions through the camera function. In addition, it avoids or reduces travel and facilitates certain organizational day-to-day practices. The negative results were related to unexpected problems with technology, distrust, and privacy, generating negative feelings of control, monitoring, and impersonality by dealing with a robot instead of a human. Thus, the study's result is that personal emotions and managers are crucial when implementing TPR because they directly affect their behaviors.

Van Steenbergen *et al.* (2018) identified the increasing number of organizations introducing more flexible work arrangements or new ways of working (NWW). This introduction is made possible by advances in ICT and human resource management practices (Gerards *et al.*, 2018). Studies in developed countries, such as the Netherlands, present the effects of these new ways of working on work engagement and people management practices. This people management is divided by Gerards *et al.* (2018) into five aspects: the time and place in which work occurs are independent; the management of the employee's production is their respon-



Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675

sibility; knowledge sharing should be with the innovative behavior of free access and use of organizational knowledge; work relationships are flexible to accommodate work life in the current private life situation; and finally, stimulation of meeting and cooperation among colleagues, aiming to maintain physical and mental health. The results of the research highlight that these aspects depend on transformational leadership as a mediator between flexible work arrangements and employee performance and suggest that this type of leadership positively impacts organizational commitment and job satisfaction.

CONCLUSIONS

The objective of this research was to identify the themes and categories related to flexible work arrangements, their trends, and issues about managing people in any kind of remote work arrangement that make up flexible work arrangements.

The literature review studies show that there is a divergence in the definition of telework because there are many variables that impact flexible work practices: time, place, profile, technology, management, and performance, and few studies consider all the variables. The most recent publications present concerns, theoretical proposals, and results about the lack or mismanagement of these variables in companies and organizations that use flexible work arrangements. The studies addressed present topics such as the selection process of professionals for teleworking, the behaviors and attitudes required, and how to manage their performance. In addition, the implementation of telework management tools such as smart work, the concern with the concept of perceived proximity and cyberslacking for the employee's well-being, the company's good performance, and the use of the telepresence robot for home telework, as a control or as a means of social integration with the company, were presented.

Several themes related to flexible work arrangements were identified, such as: sustainability, health and safety, intellectual capital retention and social responsibility, work-family conflict, teleworker control, public policies, regulations, and laws, social isolation, social inclusion of the disabled, and telework for post-disaster situations.

As for the teleworker's health and safety, the research showed that there is a need for an in-depth study on the teleworker's health and safety, especially on work safety regulations, quality of life at work, and ergonomics.

As for social responsibility, teleworking is perceived as a "green" innovation. However, it is an unexplored and overrated environmental tool to solve sustainability problems.

On management practices and government laws, regulations, and policies, the literature suggests that there is a lack of adjustment of management practices in companies and a lack of government policies, laws, and regulations.

It is hoped that the results of this research will contribute to this new perspective – necessary in the current global scenario – for the adoption of adequate measures by the managers of this modality, which is still unknown in most public and private organizations.

REFERENCES

Akyeampong, E B 2007, "Working at home: An update", *Perspectives on Labour and Income*, vol. 8, no. 6, pp. 16–18.

Allen, T D, Golden, T D & Shockley, K M 2015, "How effective is telecommuting? Assessing the status of our scientific findings", *Psychological Science in the Public Interest*, vol. 16, no. 2, pp. 40–68.

Arso, S S, Sfenrianto, S & Wahyudi, M 2018, "Employee performance measurement in teleworking using balanced scorecard", *International Journal of Electrical and Computer Engineering*, vol. 8, no. 6, pp. 5178–5184.

Bélanger, F, Watson-manheim, M B & Swan, B R 2013, "A multi-level socio-technical systems telecommuting framework", *Behaviour and Information Technology*, vol. 32, no. 12, pp. 1257–1279.

Beno, M 2018, "Managing Telework from an Austrian Manager's Perspective", *Springer International Publishing*, vol. 746, pp. 16–29.

Bentley, T, Teo, S T T, Mcleod, L, Tan, F, Bosua, R & Gloet, M 2016, "The role of organisational support in teleworker wellbeing: A socio-technical systems approach", *Applied Ergonomics*, vol. 52, pp. 207–215.

Bueno, S, Rodríguez-Baltanás, G & Gallego, M D 2018, "Coworking spaces: a new way of achieving productivity", *Journal of Facilities Management*, vol. 16, no. 4, pp. 452–466.

Brooks, S, Webster, R K, Smith, L E, Woodland, L, Wessely, S, Greenbert, N & Rubin, G J 2020, "The psychological impact of quarantine and how to reduce it: rapid review of the evidence", *The Lancet*, 395 (10227).

Cha, K J & Cha, J S 2014, "The Common Challenges to the Successful Implementation of SmartWork Program", *International Journal of Multimedia and Ubiquitous Engineering*, vol. 9, no. 2, pp. 127–132.

Charalampous, M, Grant, C A, Tramontano, C & Michailidis, E 2019, "Systematically reviewing remote e-workers' well-being at work: a multidimensional approach", *European Journal of Work and Organizational Psychology*, vol. 28, no. 1, pp. 51–73.



De Lorenzi Dancelier, M M, Lapolli, Edis M, Gomes, R K 2017, "Definitions of flexible working. A systematic literature review", *Espacios*, vol. 38, no. 29, pp. 25.

Donnelly, N & Proctor-Thomson, S B 2015, "Disrupted work: Home-based teleworking (HbTW) in the aftermath of a natural disaster", *New Technology, Work and Employment*, vol. 30, no. 1, pp. 47–61.

W 1986, "Telework - Phenomenon, Meaning, Signification, Problem", *Applied Informatics*, vol. 28, no. 10.

Duxbury, L & Neufeld, D 1999, "An empirical evaluation of the impacts of telecommuting on intra-organizational communication", *Journal of Engineering and Technology Management*, vol. 16, no. 1, pp. 1–28.

Gerards, R, De Grip, A, Baudewijns, C 2018, "Do new ways of working increase work engagement?", *Personnel Review*, vol. 47, no. 2, pp. 517–534.

Golden, T D 2007, "Co-workers who telework and the impact on those in the office: Understanding the implications of virtual work for co-worker satisfaction and turnover intentions", *Human Relations*, vol. 60, no. 11, pp. 1641–1667.

Golden, T D & Gajendran, R S 2018, "Unpacking the Role of a Telecommuter's Job in Their Performance: Examining Job Complexity, Problem Solving, Interdependence, and Social Support", *Journal of Business and Psychology*, vol. 34, pp. 55-69

Golden, T D & Schoenleber, A H W 2014, "Toward a deeper understanding of the willingness to seek help: The case of teleworkers", *Work*, vol. 48, no. 1, pp. 83–90.

Harkness, R C 1977, "Selected results from a technology assessment of telecommunication-transportation interactions", *Habitat International*, vol. 2, no. 1–2, pp. 37–48.

Higgins, C, Duxbury, L & Julien, M 2014, "The relationship between work arrangements and work-family conflict", *Work*, vol. 48, no. 1, pp. 69–81.

Hill, E J, Ferris, M & Märtinson, V 2003, "Does it matter where you work? A comparison of how three work venues (traditional office, virtual office, and home office) influence aspects of work and personal/family life", *Journal of Vocational Behavior*, vol. 63, no. 2, pp. 220–241.

Hynes, M 2014, "Telework Isn't Working: A Policy Review", *The Economic and Social Review*, vol. 45, no. 4, pp. 579–602.

Hynes, M 2016, "Developing (tele)work? A multi-level so-ciotechnical perspective of telework in Ireland. *Research in Transportation Economics*", vol. 57, pp. 21–31.

Illegems, V & Verbeke, A 2004, "Telework: What does it mean for management?", *Long Range Planning*, vol. 37, no. 4, pp. 319–334.

Ipsen, C, Nardelli, G, Poulsen, S & Ronzoni, M 2019, "Implementing Tele Presence Robots in Distance Work: Experiences

and Effects on Work", [S.l.]: *Springer International Publishing*, vol. 827, pp. 358–365.

Kim, S N. 2017, "Is telecommuting sustainable? An alternative approach to estimating the impact of home-based telecommuting on household travel", *International Journal of Sustainable Transportation*, vol. 11, no. 2, pp. 72–85.

Lee, S & Hong, J H 2011, "Does Family Friendly Policy Matter? Testing it's Impact on Turnover and Performance", *Physical Review B*, vol. 72, no. 10, pp. 1–13.

Lee, D & Kim, S Y 2018, "A Quasi-Experimental Examination of Telework Eligibility and Participation in the U.S. Federal Government", *Review of Public Personnel Administration*, vol. 38, no. 4, pp. 451–471.

Nilles, J M 1982, "Telework may soon make daily long-distance commutes obsolete while enhancing worker productivity and satisfaction", *Technology Review*, vol. 85, no. 3, pp. 56–62.

Nordbäck, E S, Myers, K K & Mcphee, Robert D 2017, "Workplace flexibility and communication flows: a structurational view", *Journal of Applied Communication Research*, vol. 45, no. 4, pp. 397–412.

O'leary, M B, Wilson, J M G & Metiu, A 2014, "Beyond being there: The symbolic role of communication and identification in perceptions of proximity to geographically dispersed colleagues", MIS Quarterly: Management Information Systems, vol. 31, no. 4, pp. 1219–1243.

O'neill, T A, Hambley, L A, Bercovich, A 2014, "Prediction of cyberslacking when employees are working away from the office", *Computers in Human Behavior*, vol. 34, pp. 291–298.

Peisert, J 2016, "Engagement and Retention: Essentials of Employee Care", in Zeuch, M (ed.), *Handbook of Human Resources Management*, Springer, Berlin, Heidelberg, pp. 699–726.

Pérez, M P, Sánchez, A M & Luis Carnicer, M P 2002 "Benefits and barriers of telework: perception differences of human resources managers according to company's operations strategy", *Technovation*, vol. 22, no. 12, pp. 775–783.

Peters, P & Den Dulk, L 2004, "Cross Cultural Differences in Managers' Support for Home-Based Telework", *International Journal of Cross Cultural Management*, vol. 3, no. 3, pp. 329–346.

Pyöriä, P 2011, "Managing telework: risks, fears and rules", *Management Research Review*, vol. 34, no. 4, pp. 386–399.

Richter, J & Meshulam, I 1993, "Telework at Home: The Home and the Organization Perspective", *Human Systems Management*, vol. 12, no. 3, pp. 193–203.

Rietveld, P 2011, "Telework and the transition to lower energy use in transport: On the relevance of rebound effects", *Environmental Innovation and Societal Transitions*, vol. 1, no. 1, pp. 146–151.



Volume 17, Número 2, 2022, pp. 173-184 DOI: 10.20985/1980-5160.2022.v17n2.1675

Salaff, J W 2008, "Where Home is the Office: The New form of Flexible Work", in Wellman, B.; Haythornthwaite, C. (ed.), *The Internet in Everyday Life*, Blackwell, Oxford, UK, pp. 464–495.

Salomon, Ilan. 1998, "Technological change and social fore-casting: the case of telecommuting as a travel substitute", *Transportation Research Part C: Emerging Technologies*, vol. 6C, no. 1–2, pp. 17–45.

Suh, A & Lee, J 2017, "Understanding teleworkers' technostress and its influence on job satisfaction", *Internet Research*, vol. 27, no. 1, pp. 140–159.

Taskin, L & Devos, V 2005, "Paradoxes from the individualization of human resource management: The case of telework", *Journal of Business Ethics*, vol. 62, no. 1, pp. 13–24.

Tedeev, Astamur 2014, "Information technologies in business processes and modern labour activity regulation problems", *Masaryk University Journal of Law and Technology*, vol. 8, no. 2, pp. 223–231.

Van Steenbergen, E F, Van Der Ven, C, Peeter, M C W & Taris, T W 2018, "Transitioning Towards New Ways of Working: Do Job Demands, Job Resources, Burnout, and Engagement Change?', *Psychological Reports*, vol. 121, no. 4, pp. 736–766, 2018.

Received: September 16, 2020 Approved: August 13, 2022

DOI: 10.20985/1980-5160.2022.v17n2.1675

How to cite: Figueira, A., Costa, S.R.R. (2022). Flexible arrangements as a trend on the future of work: a systematic

literature review. Revista S&G 17, 2. https://revistasg.emnuvens.com.br/sg/article/view/1675