AN EXPLORATORY CASE STUDY OF THE INFLUENCES PERSONAL ABILITIES AND SELF-EFFICACY HAVE ON PERFORMANCE FOR REMOTE WORKERS

Research dissertation presented in partial fulfilment of the requirements
for the degree of
MSc in International Business Management

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22/05/2020

Candidate Declaration

Candidate Name: Monica Araujo Marques

I certify that the dissertation entitled: An Exploratory Case Study of the Influences Personal Abilities and Self-Efficacy Have On Performance for Remote Workers submitted for the degree of: **MSc in International Business Management** is the result of my own work and that where reference is made to the work of others, due acknowledgment is given.

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Date:

Dedication

This dissertation is dedicated to my family and my partner Jeff, as an appreciation of their love and support in my career growth.

"Happiness is the consequence of personal effort. You fight for it, strive for it, insist upon it, and sometimes even travel around the world looking for it."

(Gilbert, 2009)

Acknowledgements

Abstract

An Exploratory Case Study of the Influences Personal Abilities and Self-Efficacy have on Performance for Remote Workers

Monica Araujo Marques

This dissertation explores the personal abilities and self-efficacy variables that have an influence on performance in the context of remote work, advances in technology and the global spread of COVID-19. The recent pandemic has forced many companies to increase employees' physical proximity from their place of work and, in order to maintain service levels, precipitated a vast expansion in remote working.

The research aims of this study were developed to investigate which tools remote workers have available to overcome obstacles in a virtual environment and the challenges faced while performing their jobs. To represent these objectives and provide structure to the research, the following research questions were proposed:

1. What is the importance of self-efficacy for employees in performing their tasks when working remotely?
2. What are the challenges remote workers face when performing their job?

The study has an extensive literature review of the pertinent subjects relevant for remote work which allowed for the development of a conceptual framework and informed the approach for primary research.

This dissertation takes the form of an exploratory qualitative case study methodology and semi-structured interviews as a data-gathering tool, this approach was selected after considering the research questions and the context of this dissertation.

This research contributes to the existing literature by proposing that organisations address certain core issues when adopting remote work as a business strategy, and the role of personal abilities and self-efficacy during the evaluation of the performance of remote workers.

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1   Introduction

This dissertation aims to investigate the personal abilities and self-efficacy variables which influence performance in the context of remote work. This chapter presents a general introduction to the dissertation. It first supplies an overview of the study and the research purpose. This is followed by the significance of the study, aligning it to research objectives and concludes with a presentation of the structure of the thesis.

1.1   Overview

The nature of work, in the last 30 years, has evolved with remote working becoming more widespread. The shift of paid work from a company's location to home or mobile workspaces has altered the structure and culture of work (Ellison, 1999). In recent years, many companies have moved to a new business model that established teams dispersed in different regional locations.

The remote work research topic pertinent to many different fields including information systems, communication and psychology, which leads very often to conflicting outcomes (Allen *et al.*, 2015). The implication of the separation between employee and company location are that a more significant investment is required to monitor performance using remote management.

The extensive scope of this dissertation is to study performance in a virtual work environment through an examination of remote work characteristics, employee's experiences, and work impressions. All factors that could impact when performing work in virtual teams.

This research is centred on strategic management practices that could model employee's behaviour leading to better performance for remote work employees.

1.2 Research Purpose

Before 2020, companies like Yahoo, IBM and Best Buy have reduced or completely eliminated their remote work arrangements despite it saving millions to the company by reducing office space (Wright, 2015). But with the spread of COVID-19 and its continuing advance, the majority of companies have moved to a work from home policy as the only alternative to maintain the services levels. This transition to work from a different and non-traditional environment comes with challenges for both parties, employees and organisations.

Staples, Hulland and Higgins (2006) state in their study how management practices could increase remote workers performance using tools to improve employee's self-efficacy. This study utilizes their framework to create an analysis of how input elements like personal abilities and self-efficacy described by participants could result in a greater output of performance. Due to the limitations imposed by the dissertation rubric, not all groups suggested by the author will be described in this study case.

Finally, my personal motivation for this research is related to my current job position as a remote worker, a job I have been working in for little over a year. I intend to gain a better understanding of managerial practices and tools that can increase performance and improve behaviour.

1.3 Significance of the Study

The majority of research literature available defines remote work as when employees spend some time in the office and a few hours working remotely. The literature review indicates that employees should be in the office a few hours/days a week for offline interactions so as to reduce individual isolation and achieve expected performance. There has been little research undertaken on the impacts for organisation and individuals when remote work is a full-time endeavour.

One of the issues underlying the research is related to the dilemma surrounding the consequences of working from home in the research literature as well as its

application. When analysed the implementation of remote work in companies in the same field, it is hard to find a consensus or systematic evidence that it is an acceptable management practice (Bloom et al., 2012).

As Neirotti et al. *(*2012) claim that remote work itself does not have a direct effect on performance and productivity, it might be related to a combination of more investment in technology infrastructure and employees' qualifications and new work practices. On the other hand, a plethora of research discusses the applicability of this model as increasing performance related to more job satisfaction at work (Golden, 2006).

Hislop *et al.* (2008) suggested in their article 'The Challenge of Remote Working', that there is a lack of studies focussing on the role of self-efficacy and employee performance relationship for remote work and that more research is required specifically on the role of personality in people's experiences of remote working and the nature of the employment relationship of remote workers.

1.4 Research Objective

There is a dearth of empirical research on employees' perception of working from home, there are researchers who emphasize the importance of shifting from observation of activity to objective evaluation of results when managing remote employees (Pancucci, 1995). The focus of this research has been on the self-efficacy inputs and outputs to increase performance in virtual teams.

The dissertation has investigated the challenges that employees face when shifting their work to virtual teams and the tools being used to maintain motivation and performance at a high level. Companies that work with intensive technology knowledge have shifted to remote workers. This allows firms to gain a competitive advantage due to having a wider knowledge base to hire from giving them access to people who otherwise would not be in a standard commuter catchment area.

Working at home saves on commute time while offering a more flexible schedule which in turns can create a better work-life balance for the employee. Studies

suggest that remote working offers more autonomy which can lead to an increased level of productivity. On the other hand, it means the geographical separation between personal and professional life no longer exists, which can cause issues with a work-life disconnection leading to a more intense and stressful work environment.

The main questions that will guide this research are:

1. What is the importance of self-efficacy for employees in performing their tasks when working remotely?
2. What are the challenges remote workers face when performing their jobs?

These questions guided the analysis and the layout of a framework to develop this study using the pertinent topics in researchable areas. Data was collected with semi-structured interviews with remote workers to analyse the challenges and tools they have available to work and how management practices could be improved to assist in the performance of remote workers.

1.5   Structure of the Study

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Figure 1 – Structure of the Study

2 Literature Review

2.1 Overview

This section provides a general literature review on self-efficacy and its relation to employee performance and how it can inform managerial practices related to remote work. The relevant core terminology, concepts and frameworks were selected to provide a sound evidential base from which the research objectives can be addressed, and the conceptual framework designed to guide this research.

2.2 Social Cognitive Theory

In 1986, Albert Bandura adapted Social Learning Theory (SLT) to develop Social Cognitive Theory (SCT). SCT says that a person learns from an interaction between individuals, environment and behaviours and explains through six concepts how individuals coordinate behaviours to achieve goals that could be supported over time (Bandura, 1989). Self-efficacy judgement is one of those concepts, where it works as an input for an individual to achieve performance and expected behaviour. The main concepts are described below:

- **Triadic Reciprocal Determinism**
  The central concept of Social Cognitive Theory. It asserts that individuals are products and producers of their environment, so their behaviour and individual interactions influence the environment.
- **Symbolising Capability**
  Individuals measure their ability to perform through their skills and knowledge, so they must know what to do.
- **Vicarious Capability**

Learning results from the observation of people's behaviour and its consequences of successful demonstration of behaviours.

- **Forethought Capability**

    Individuals carefully consider the consequences of their attitudes; they set goals and plan actions that will produce the required results. The expectancies come from earlier experiences.

- **Self-Regulatory Capability**

    This is the internal or external reinforcements an individual uses to control behaviours; it connects behaviour and environment.

- **Self-Reflective Capability**

    It is a reflective self-consciousness capability that allows individuals to inspect their actions and experiences so they can be aware of their knowledge and evaluate their behaviour. The capacity to self-reflect influences actions, judgements and regulates the intensity of effort an individual will use to perform an activity, overcome challenges and persists on the goals (Bandura, 1989).

2.2.1 Self-Efficacy

Self-efficacy judgments work as determinant of how individuals behave; it refers to self-belief in the ability a person has to succeed in a task, their confidence to achieve goals and overcome obstacles. Bandura states that people must make decisions every day and decide how much effort they will put into each action, accurate evaluation of individual self-efficacy capabilities is valuable, and miscalculations could produce adverse consequences (Bandura, 1989).

According to social cognitive theory, an individual can shape his/her reality through behaviours and motivation. When employees set performance goals for themselves, and believe they have the tools to achieve it, they can influence performance using self-efficacy attributes. This means employees with high levels of self-efficacy are predisposed to accept arduous goals, persist at challenges and work harder on tasks which would lead to higher motivation and performance (Bandura, 1997).

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Bandura (1986) created the Self-efficacy Theory as a component of a social cognitive theory that relates to the capacity of individuals to perform and motivate themselves. Applying this theory to remote work is essential because employees have autonomy in virtual organisations, and they need to rely on their competences to complete the tasks.

Many different studies have attempted to demonstrate the influences of self-efficacy on organisations inputs and outcomes, most of them utilizing laboratory experiments, quantitative or longitudinal field studies. Self-efficacy is a human cognition that affects organisational factors and behavioural outcomes. Organisations have the role of providing information like feedback and training so employees can use it to generate self-efficacy judgments. Self-efficacy changes over time in response to information acquired, and it involves a motivational element (Bandura and Jourden, 1991; Gist, 1989; Saks, 1995; Gist and Mitchel, 1992).

Several drivers influence individuals' self-efficacy judgments:
- *Performance accomplishments*: past experiences that led to success increase self-efficacy, while past experiences of failure decrease it;
- *Vicarious experience*: observation and modelling of others performing successful projects;
- *Social persuasion*: receive evaluative feedback and/or coaching;
- *Physiological and emotional states*: as a response to a specific job leading to anxiety or contrary discernment.

(Bandura, 1978; Bandura and Cervone, 1986; Gist and Mitchel, 1992).

Figure 2 is a diagrammatic representation of Bandura's theory (1977). It shows the sources individuals must assess to make self-efficacy judgments. According to the author, if an organisation increases self-efficacy judgements for its employees to complete tasks, its overall performance can be improved (1989).
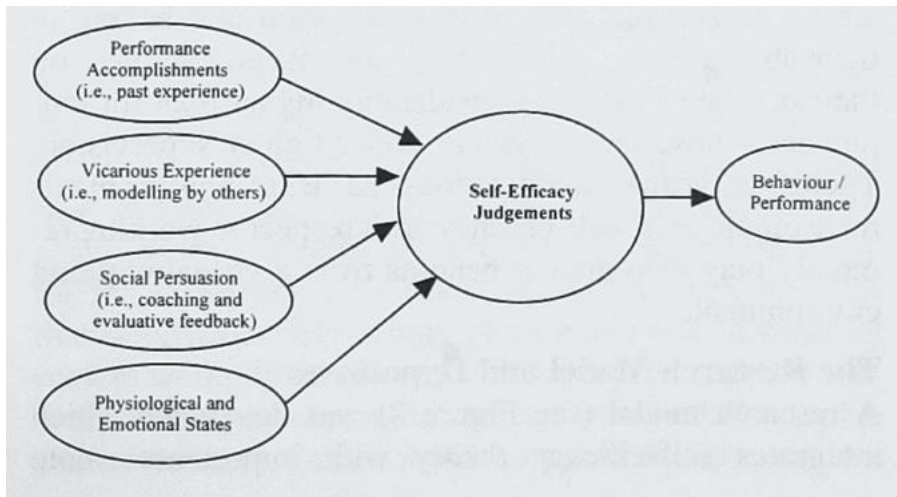
Figure 2 – Self-Efficacy Theory (Bandura, 1977)

Staples, Hulland and Higgins' study (1999, pp. 759), delineates a framework that links remote management and self-efficacy theory. The inputs an organisation have available are training, I.T., physical conditions, connectivity, computer anxiety, modelling best practices by manager, and remote work experience. It demonstrates that self-efficacy plays "a critical role in influencing their remote work effectiveness, perceived productivity, job satisfaction and ability to cope". If managers could control the input of factors, it would be possible to increase performance by applying management practices that improve employees' remote work self-efficacy (Staples, Hulland and Higgins, 1999).
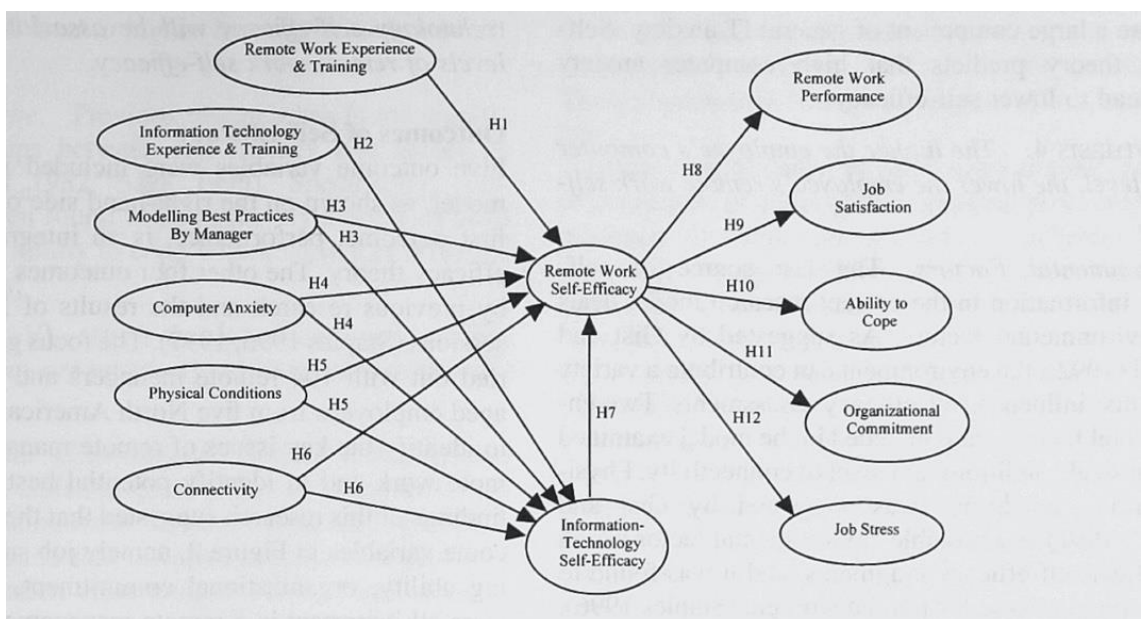
Figure 3 – The Research Model (Staples, Hulland and Higgins, 1999)

2.2.2 Self-Efficacy and Performance

Psychology and management theories have endorsed the idea that self-efficacy and goals are essential, interconnected constructs (Bandura, 1986; Gist, 1987; Mitchell, 1994; Vancouver and Thompson, 2001). Locke and Latham (1990) developed a model which describes the effects of self-efficacy on motivation and performance and the adoption of higher goals due to higher self-efficacy levels.

The literature shows that employee behaviours influences organisational and task performance and researchers have tried to identify how individual characteristic could have a beneficial impact on firm's productivity (Seibert et al., 2001; Hermann and Felfe, 2014; Belschak and Den Hartog, 2010).

A study involving 56 undergraduates students proved that past performance affects self-efficacy both positively and negatively when observed predictions of future performance. It is seen an increase in performance across-time when employees would adopt higher goals that resulted in higher performance if they can perform at that level. Also, when performance levels are not precise, the employee effort level will decrease because of an inaccurate self-efficacy perceived performance (Vancouver, Thompson and Williams, 2001; Powers, 1991).

Shea and Howell (2000) developed a study to investigate self-efficacy and performance using task feedback and task experience based on employees most recent feedback on their performance. Self-efficacy attributes are dynamic, and change when new information and experience are acquired, this connects with Bandura's affirmation that self-efficacy is a cognitive and self-regulatory process.

Staples, Hulland and Higgins (1999, pp. 162) developed a model integrating self-efficacy theory and management issues, as an outcome of self-efficacy. They created the hypothesis below: 'High levels of employee self-efficacy on remote work-enabling tasks will be related to employees' positive perceptions of their performance'. It infers that employees would believe they can perform their tasks more efficiently.

Contrarily, some aspects of self-regulation theory imply that self-efficacy could decrease performance; it is not clear if self-efficacy influences the acceptance of a problematic goal depending on past performance. Some research indicates that higher goals will be adopted if it seems like a personal goal (an internal representation desired by the individual). So, there is a paradox between self-efficacy and goal setting theories and thus the impact on employee performance is unclear (Austin and Vancouver, 1996; Locke and Latham, 1990; Vancouver and Thompson, 2001).

2.2.2 Limitations of Social Cognitive Theory

Social Cognitive Theory assumes that changes will influence an individual in the environment, but little research has been done to evaluate those behavioural changes (Nabi and Clark, 2008). It is unclear to what extent the individual, the environmental and the behavioural are affected by previous behaviour or future expectations. Also, the theory has a broad reach which limits its accuracy.

2.3 Performance

Strategic human resource theories contend that the efficient management of human resources has a positive impact on organisational performance through the performance of employees. Organisational performance and how to achieve high productivity levels has been described in organisational behaviour and human resource literature for decades (Bommer et al., 1995; Lawler, & Worley, 2006; Schiemann, 2009).

In its general definition, performance is the reach of a unit of an intended goal (Jung, 2011). This term, though, is not entirely clear, Bogh claims that performance is subjective and is viewed as an operation of performance evaluations instead of there being a clear distinction between subjective experiences or perceptions and external factors (2016).

The literature review divides performance in financial/organisational performance and employee/task performance. From the company point of view, it uses different financial measures to evaluate performance like revenue, sales growth or stock prices that is, it relates to the financial health of a company. Verboncu and Zalman (2005) state that performance is the result of management, marketing and economic practices that lead to effectiveness, efficiency and competitiveness for the firm.
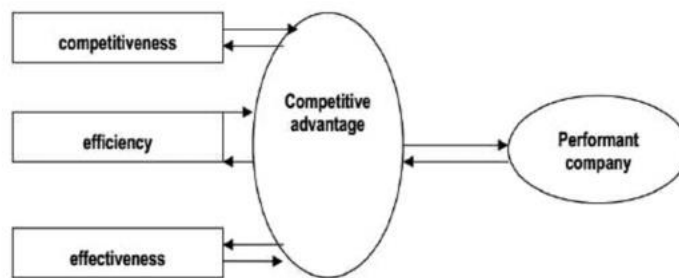
Figure 4 - Performance Drivers (Verboncu and Zalman 2005)

2.3.1 – Employee Performance

Employee performance refers to individual behaviours and how efficiently they perform at the task level, every individual in the organisation makes a contribution to its success, and it is a vital subject of Human Resource effectiveness (Pradhan and Jena, 2017). Human Capital Theory studies assert that knowledge, skills and abilities (KSA) drive individuals to achieve better performance and employee's behaviours directly and indirectly contribute to the company's prosperity. (Hahn, 2018).

According to RBV, a firm's capabilities associated with employees' KSA can assist in increasing organisational performance, its measurements should be applied to strategic human resources decisions and aligned to companies objectives so that it can support long-term company's goals integrated with the company's business strategy (Sabherwal, 2019; Lawler & Worley, 2006; Schiemann, 2009).

2.3.2 Employee Performance in Remote Work

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Many studies have tried to discover if remote work reflects in employee productivity, job stress and well-being. Those arrangements could increase job satisfaction and decrease exhaustion, leading to an increase in performance, but more research is necessary to testify to this phenomenon (Golden, 2006).

As already discussed, Social Cognitive Theory affirms that performance is influenced by individual motivation and task strategy development. Employees work as agents of their motivation which makes this study relevant to implement better managerial practices to increase performance (Bandura, 1989; McCormick, 2001).

Ellison in his article 'New perspectives on Telework' discusses the attrition created by removing divisions between work and home. Although remote work can provide more flexibility for workers, it could also remove physical barriers between work and home, thus exposing employees to a role conflict (1999). Commuting time to and from work creates a transition from work to home, and employees develop different strategies to enforce this division.

Studies with remote workers reveals a positive link between intense work and reduction of stress when working from home under pressure, work could be arranged to suit personal conditions and lead to a better performance (Sardeshmukh et al., 2012).

Remote employees have a more positive attitude in relation to organisations and work is reported as "more pleasurable and stimulating". Conversely, working remotely could be detrimental for the work-life balance. However, it is advantageous for enterprises because workers have more enthusiasm and job satisfaction as employees work longer hours and are more committed (Felstead et al., 2017).

An empirical research instrument was used to create an experiment in Ctrip.com International, Ltd. call centre where employees were assigned to work from home for nine months. This study showed that remote work increased workers' performance by 13% and the job attrition rate decreased by 50% (Bloom et al., 2012). Burgess and Connel created the concept of "flexible autonomy" having

observed work being done in three call centres in Sweden. In this study, managers introduced new policies where employees could have relative freedom and autonomy on how work was to be done, which lead to an increase productivity and job satisfaction (2006).

Kossek and Thompson (2016) claim that Control Theory (the ability to control the work environment), shows that giving some flexibility to an employee such as offering that they work from home can be used as a motivational tool to increase behaviours which could lead to better performance. The theory infers that if an employee has a sense of control over job demands, they will have a better well-being balance.
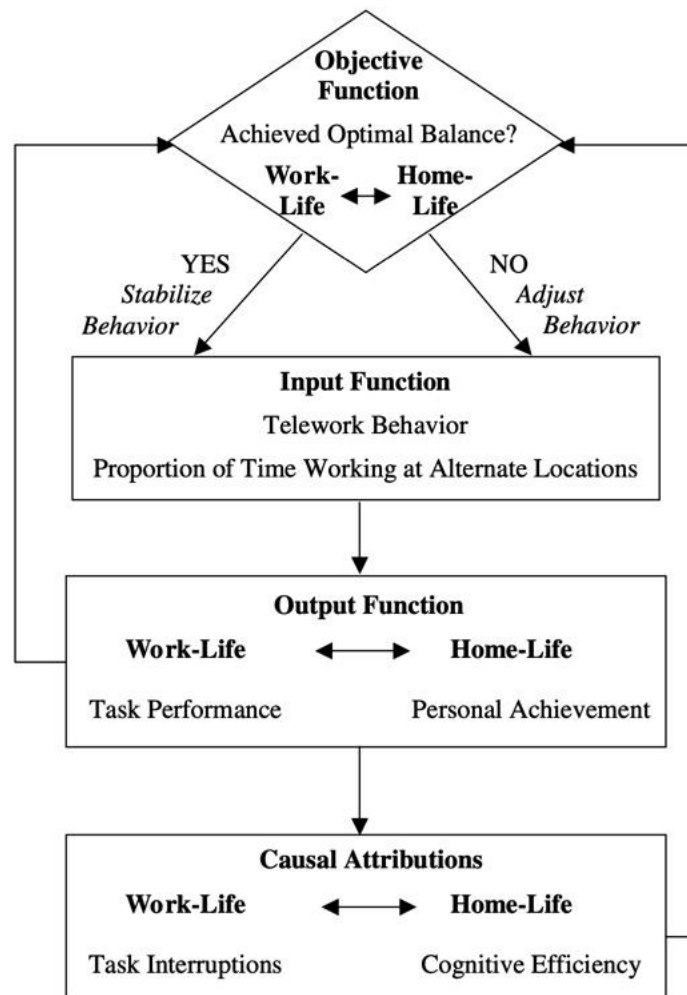

Figure 5 – Research Model (Hunton, 2005)

In Figure 5, Hunton examines task performance as an output function of remote work. He created this model to study policies that would allow employees to have

a better work-life balance: "The telework location choices (i.e., behaviours) of employees are considered an input function that will affect work performance and self-perceived home-life balance" (Hunton, 2005, pp. 115). The author has used self-determination theory to describe the internal motivations for an employee to decide to work remotely as a way to achieve a better work-life balance. This motivation is guided by autonomy, relatedness and self-efficacy.

Hunton's study measured task performance and infers that working exclusively from home decreases the productivity of employees; the cause of this decrease is due to non-work-related interruptions. He says that working from home increases friction between family members which could result in stress in an employee's personal life and reduce the perception of personal achievement (2005). Conversely, Fonner and Roloff (2010) claim that remote work permits employees to escape from workplace distractions and leads to higher job satisfaction.

The sum of employees working in one place is perceived as more significant than employees working from different locations because the knowledge share and cooperation between workers creates a beneficial synergy. On the other hand, interruptions when working on-site are more often what creates a decrease in productivity. Spatial and time flexibility is associated with higher autonomy and fewer interruptions at work (Messenger, 2017; Topi, 2004).

Many studies have demonstrated that dissimilarities in performance levels between remote worker teams and face-to-face groups decrease over time (Ren, 2018). According to Bouas and Arrow (1996) after seven weeks, differences among both groups in carrying out negotiations and performing creative tasks had disappeared. Remote work teams overperform (in terms of precision, communication, knowledge sharing) when time is given for employees to adapt and create strategies to work in a virtual environment, an increase of 29.9% was reported in the performance of virtual teams, compared with in-house groups (Purvanoa, 2014; Dubrin, 1991).

Topi analyses how the isolation of long hours at home while working is challenging compared to the flexibility at work. He says that the process of evaluating remote workers performance should be undertaken by measures of employees' contribution, results, and compliance with company goals rather than behaviours (2004). When work can be performed from anywhere, technology is the tool that creates the condition to perform tasks, but social norms are the main aspect influencing an individual working off the company premises (Rosengren, 2015).

Conger and Kanungo (1998) analysed how communicating strategies and visions effectively has a more significant impact on employees in achieving goals and removing barriers generated from the lack of face-to-face interactions Managers from virtual teams are expected to know when and how to intercede, the assessment and evaluating of performance for remote workers should be adapted to ensure individuals are assessed in conformity of remote circumstances (Barge, 1996). Valsecchi (2006) and Hislop et al. (2008) claim that companies using technology to assess employees' performance could take advantage of those tools. However, it will not provide an in-depth analysis of behaviour due to its complexity.

2.4 Remote Work Environment

The era of globalisation, with the rapid increase of information and new communication technologies, makes possible the creation of virtual organisations using mobile work as a strategy to reduce costs, increase productivity and retain employees independent of their geographic position (Felstead & Henseke, 2017). It was in the 1970s that telecommuting become popular in the United States during the fuel shortages. In 1973, Jack Nilles published 'The Telecommunication Transportation Trade-off' where he discussed the reduction of commuting time to and from work, earning himself the moniker ' The Father of Teleworking' . Nilles (1994) contends that remote work is possible when information and communication technologies are used to bring work to employees outside of the companies' premises.

From the late 1980s, the internet, electronic communication and teleconferences transformed how work was done and remote working began to grow in popularity. In 1995, the American Congress approved regulations for flexible work, and in 2010 President Barack Obama signed the Telework Enhancement Act that required federal agencies to create policies for employees to work remotely. More recently, the increasing sophistication in technology has made communication possible between company and employee from almost anywhere, leading to some 70% of the world's population working remotely at least once a week (IWG, 2018; Ellison, 1999; Nilles, 1976; Huws, 1990).

This trend is mirrored in Ireland which has also seen an expansion in remote working in Ireland. The Irish Central Statistics Office (CSO) reported in 2016 that approximately 94,955 employees work from home (partially or always), representing an increase of 14% since 2011. According to the Eurostat report from 2018, 6.2% of people living in the European Union often work from home (Eurostat, 2018).

The expenses for a company with buildings, offices and their maintenance are high and hard to justify if demand is low or unpredictable, this justifies an organisation's intentions to shift to flexible work for being more cost-effective in unstable times.

In early 2020, a novel virus Covid-19 began to spread around the globe and from March many of the world's countries began to implement lockdowns in an attempt to halt the virus's progress. An important element of many nations' measures was the curbing of travel which led to many employees transitioning to remote working Isolation and lockdown measurements contributed to a massive move of employees to work from home.

The Oxford COVID-19 Government Response Track report from 8th May 2020 (see Figure 6) displays the government response stringency index using indicators like school and work closures, travel bans, international travel controls, restrictions on internal movement.

COVID-19: Government Response Stringency Index, May 8, 2020

The Government Response Stringency Index is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest response).

This index simply records the number and strictness of government policies, and should not be interpreted as 'scoring' the appropriateness or effectiveness of a country's response.

Source: Hale, Webster, Petherick, Phillips, and Kira (2020). Oxford COVID-19 Government Response Tracker – Last Updated 8th May.
OurWorldInData.org/coronavirus • CC BY

▶ Jan 21, 2020   May 8, 2020

Figure 6 - Government Response Track Index (University of Oxford, 2020)

Felstead and Henseke (2017, pp. 197) developed three theories to explain the growth of remote work. The first theory says that work is going through an economic shift, where non-physical assets like services and software are emerging and changing "the fixity of work since knowledge creation is less spatially bounded'. The second theory relates to the flexibility of work. Employees are taking on work when and where it is available, allowing employers to make arrangements for how many hours, where and when people can work. The third theory is related to organisational adaption. Employers are compelled to adapt "in response to societal norms and expectations" (Felstead and Henseke 2017, pp. 197), demographic changes and the nature of the workforce, thus they can offer arrangements to address employees needs and personal circumstances.
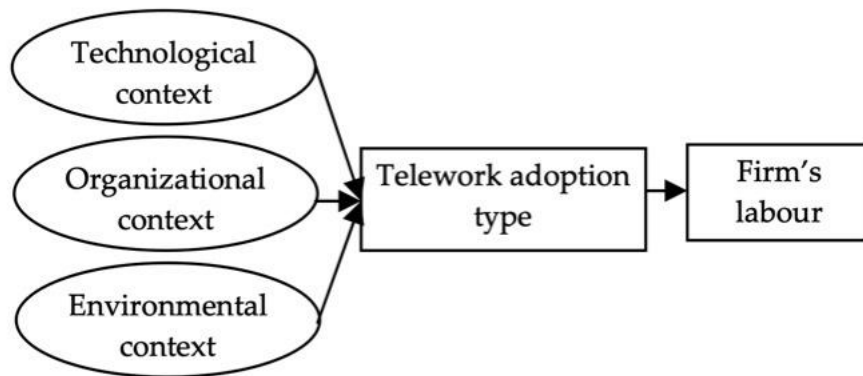
In Figure 7 (Neirotti *et al.* 2012), the authors affirm that two variables are essential for virtual organisations: the need to improve flexibility and the level of service and more flexibility in the creation of jobs. They created a framework for firms' propensity to transition to teleworking and the contexts in which it is located involved. They assert that three elements are necessary to create the right context: "codifiability, standardizability and modularizability" (Neirotti et al. 2012).

Mobile work, in recent years, has mainly been dependent on new technologies available to help to create virtual organisations because members from virtual teams share tools to work and communicate with peers. In an extension of mobility, the service sector has emerged as a possibility for companies to achieve goals and be available to attend customers from anywhere, something not possible without computer-mediated communication.

The component entities of a virtual organization are:

Geographically distributed

Electronically linked

Functionally or culturally diverse

Lateral (versus hierarchically) connected

Making the following organization designs possible:

Highly dynamic processes

Contractual relationships

Edgeless, permeable boundaries

Reconfigurable structures
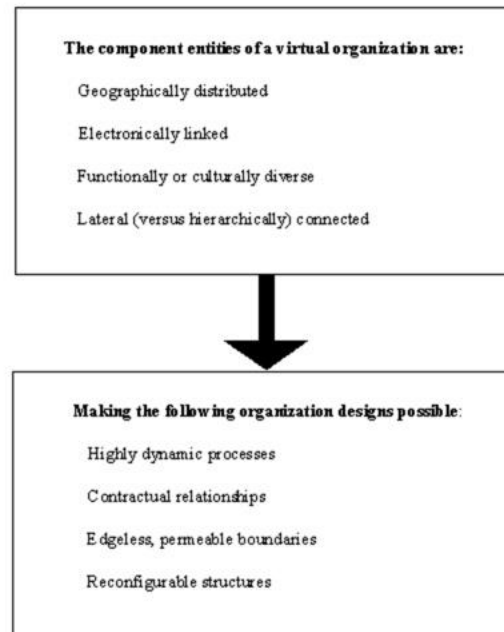
Figure 8 – Attributes of virtual organisation (DeSanctis and Monge, 2006)

In Figure 8 (DeSanctis and Monge, 2006) present the summarised attributes of a virtual organisation, creating a framework that exposes six areas of electronic communication and significant implications for virtual teams: Communication efficiency, online tasks, message comprehension, rules of technology use, lateral communication and evolutionary effects.

The research demonstrates that isolation limits the adoption of remote work; and reduces social networking and dissemination of information. The creation of informal channels and CMC (computer-mediated communication) are vital for virtual organisations to decrease the social impact of working away from the company's premises. An efficient telecommunication infrastructure is the base from which to support remote work in a virtual environment, tools like virtual private networks (VPN) permits employees to have access to data resources from anywhere, but in contrast, the use of virtual channels restrict the interactions between individuals.

The individuals that compose a virtual team are electronically connected via lateral relationships and geographically dispersed, Wiesenfeld (1998) affirms that electronic channels are crucial to the continuity of organisational identification in

virtual teams because all communication will go through those virtual channels, the company has to create formal and informal tools that are vital to execute work.

Gibbs and Gibson state that promoting a safe environment for sharing knowledge and communication is the most effective way to reduce conflicts related to distance and that managers are responsible for ensuring communication is shared to all individuals and assimilated in a way that is useful for performing work tasks (2006).

The primary literature available works on the premise that employees are satisfied with flexible work arrangements but, in addition to these benefits, changes in the work structure will also benefit employers as the workforce is from different locations, but it could make the company less attached to the individual. For that reason, it is essential to analyse the application of remote work and its impact on employees.

2.5   Conceptual Framework

Following the framework created by Staples (1999), I have created a model that links personal abilities like time management, self-efficacy and IT skills to achieve performance in a remote work environment. The channel to achieve better performance will be the improved dissemination of information as well as more effective communication in the virtual team. Other input factors such as work experience and training, modelling practices by managers, computer anxiety, physical conditions and connectivity are not within the scope of this study nor are output factors for instance job satisfaction and stress, the ability to copy and organisational commitment.
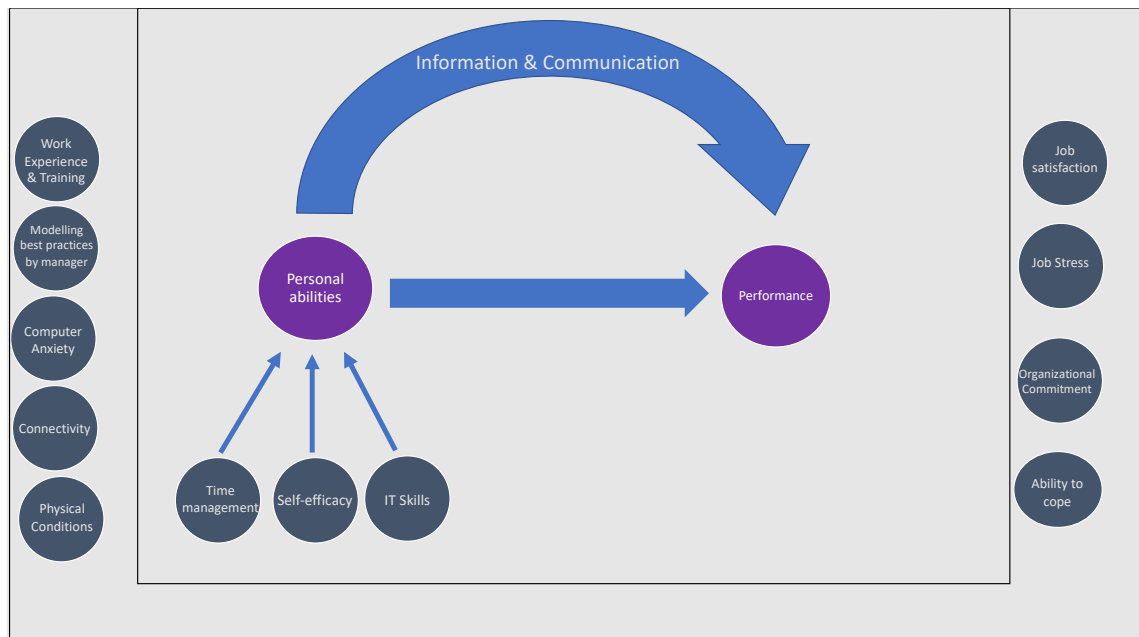
Figure 9 – Conceptual Framework

2.6　　Conclusion

The development of technologies, globalisation and new modes of work has allowed companies to create flexible arrangements that increased the number of employees working remotely. Allen, Golden and Shockley (2015) affirm that only organisations that are already performing well can afford to implement remote working. In terms of individual performance, they state that remote work is positively linked to objective measurement of job performance and those arrangements have the potential to reap benefits at organisational, individual and societal levels. Furthermore, an understanding of the benefits and disadvantages of its adaptation should be used to more effectively shape and inform organisational practices and public policy in a more effective way.

Remote work involves flexibility in location, working hours, work schedules and practices, challenging traditional organisational theories causing a reestablishment of the way work is conducted and leading to variable results on the employment relationship (Taskin and Edwards, 2007).

Even though many studies have shown that Human resource practices can promote desired behaviours among employees, further research is necessary to

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improve insights on how employee perception related to remote work could influence their performance. This would allow a delineation of an H.R. strategy that enhances the productivity of the remote workforce. One of the flaws in studies of the relation between remote work and performance in the literature review is the accuracy and absence of controlled experiments, which generates concerns about reliability.

The review of the literature indicates that further qualitative research in the form of in-depth interviews with remote workers is necessary to determine if self-efficacy has an impact on performance in a virtual environment from the employees perspective. There is research available linking self-efficacy and performance. However, there is a gap in terms of remote work, and previous studies have utilised only qualitative studies and from the perspective of the organisation.

3 Methodology and Research Design

3.1 Overview

This chapter describes the different forms of research and the rationale behind the research method and data analysis approach for this dissertation. This section begins by review of the common research paradigm, as well as philosophical approaches, followed by an analysis of quantitative and qualitative methods. It concludes with a section on the ethical concerns and issues associated with this research.

3.2 Research Paradigms

Thomas Kuhn (1962) has described a paradigm as a philosophical way of thinking; a research paradigm is a set of ideas used to describe the researchers' standpoint and guides the investigation. The choice of methodology and methods and implications of the decisions made during the research will be influenced by the research paradigm (Guba and Lincoln, 1994; Kivunja and Kuyini, 2017). The essential elements of a research paradigm are epistemology, ontology, methodology and axiology (Guba and Lincoln, 1994).

Epistemology is the study of human knowledge and its justification, and it explains how the researcher acquires knowledge about the research subject, it can be divided into intuitive, authoritative, logical or empirical knowledge, depending on how the researcher understands the world (Kivunja and Kuyini, 2017; Schwandt, 1997; Slavin, 1984).

Ontology is the study of the nature of reality. It is the understanding of the constituents of the world like the nature of being, existence and reality. (Scott and Usher, 2004).

Methodology is the structure employed to develop a research project that includes its design, methods, procedures, approaches, data gathering, data analysis and participants (Keeves, 1997).

Axiology concerns the ethical issues that a researcher when planning a project. It is an evaluation of the risk, privacy and moral issues of their audience when developing research (Finnis, 1980).

3.2.1   Positivism/Quantitative research

According to Candy (1989), paradigms can be divided into three taxonomies: Positivism, Interpretivism and the Critical paradigm. There is a relationship between methodology and paradigm because both guide the researcher in terms of data collection procedures, tools, participant's selection and research questions (Kivunja and Kuyini, 2017).

Researchers that engage in theory testing often consider working with a quantitative approach in nature; they are associated with a positivist approach and scientific method. It seeks certainty and objectivity as outcomes of the research, using controlled examination (Glaser and Strauss, 1976; Alavi et al. 2018; Creswell et al. 2003). It contends that through research, we can acquire knowledge which helps reveal an objective reality.

Johnson and Onwuegbuzie (2004) argue that some of the weakness of quantitative research is that researcher's categories and the theories used may not reflect the reality of participants, a greater focus on hypothesis testing may shadow the phenomena or theory generation. The theory generation might be overly abstract and only applicable to specific situations.

3.2.2   Post-Positivism/Qualitative research

According to Creswell (2003), qualitative research is based on social constructs which have multiple outcomes to be discovered, and data collection is analysed and explained through the context and values of the investigator, it is built on the social constructivist school of thought (Polkinghorne, 1988). Typical instruments of qualitative research include case studies, grounded theory, phenomenology and narrative analysis. The attempt to understand and interpret human experience is the central objective of a phenomenological paradigm, and its main

tenet is that social reality is based on the individual's experience of that social reality. This inductive approach attempts to locate the logic of the subject (Gray, 2004; Bogdan and Biken, 1998).

The weaknesses of qualitative research are manifold including: difficulty in testing the hypothesis, a longer duration for data collection, time consuming analysis of data and the danger that results might be impacted by a researcher's bias. In order to overcome the challenges that emerge from the nature of qualitative research, the researcher should avoid relying on unsystematic data analysis tools and attempt to decrease the subjectivity of the research (Johnson and Onwuegbuzie, 2004).

3.3 Research Method

This section explains the logic behind the choice of method for this paper, and presents the research questions, objectives and context revisited.

An efficient research strategy helps to delimited the reasons for using data-collection methods to support the evidences (Willan, 2016), it provides an outline of how the research will be carried out and the plan of action to collect and analyse the variables connected with the investigation (Leedy & Ormond, 2016).

The review of the literature outlines the large number of constructs associated with self-efficacy and performance in a conventional work environment. However, the objective of this research is to investigate the relevant variables related to remote work and the perception of employees of this phenomenon.

The objective of this research is to understand how remote work employees perceive their performance in relation to their individual self-efficacy, thus qualitative research is best suited to assist in uncovering the inherent complexities of virtual work. In order to encapsulate this objective and provide a design to this research, the research questions are revisited:

1.   1. What is the importance of self-efficacy for employees in performing their tasks when working remotely?

2.   What are the challenges remote workers face when performing their job?

The main focus of this study is to uncover opinions of employees on the process of working remotely, as well as an attempt to uncover the feelings and experiences of a category of workers in a specific context.

According to the research questions, a phenomenological approach is adopted, Tesch (1990) writes that this approach is based on the description and interpretation of an individual with a focus on the lifeworld of human experience. This study will prioritise inductive logic and pursue the subjective opinion and interpretation of participants (Gray, 2004).

This research is not concerned with generalizations to wide-ranging populations, but more with contextual description and analysis, so it will be performed using qualitative data analysis.

3.4 Research Method Selection

An exploratory qualitative case study methodology and semi-structured interviews as a data-gathering tool were selected after considering both the research questions and context of this dissertation.

There are four categories of study that can be employed in the research purpose: Explanatory, interpretive, descriptive and exploratory (Maxwell, 2005). Exploratory studies aim to explore a situation and pose questions about a subject when there is not enough information about a phenomenon, or the existing literature is scarce. The literature review chapter established that many researchers have explored self-efficacy and performance, but there is a lack of studies exploring its applicability to remote work. Other methods of study were

considered, but they were deemed not appropriate for this dissertation because of its context (Yin, 2013; Gray, 2004).

A case study research explores a process, and is a strategy of in-depth investigation in which the researcher considers an activity or individuals, describes a real-life context and clarifies real-life constructs that would be overly complex for rigid and unadaptable methods like quantitative study. A qualitative study will provide enough information for the author to decide if the findings of the research can be applied to other situations (Creswell, 2009; Yin, 2009; Maykut and Morehouse,1994).

3.5 Data Analysis

Case studies require a thorough description, followed by an examination of the data by themes to find patterns or concepts that emerge from the data itself and then to examine the correlation with the research in which the majority of data is collected from interviewees' recorded answers. Through the inductive approach, the investigator moves towards exploring an unalterable principle, being aware not to accept mistaken deductions related to their own bias (Stake, 1995).

Creswell (2009), says that "it is an ongoing process involving constant reflection about the data, asking analytic questions, and writing memos throughout the study". Figure 7 depicts a linear approach to data analysis, but in reality, the steps are interrelated, that means that while the researcher analyses one interview, patterns emerge that could be linked to another interview, this is why the process of writing a journal should contribute to the final report.
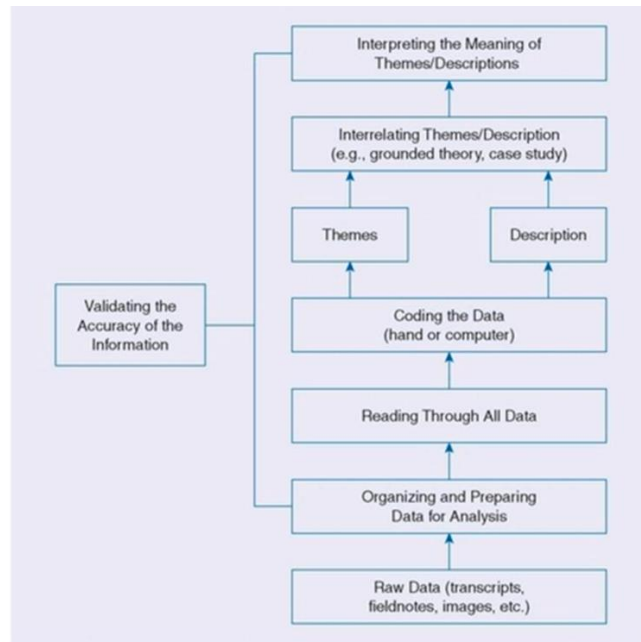
Figure 10 – Data Analysis in Qualitative
Research (Creswell, 2009)

3.6 Collection of Primary Data

This case study will use qualitative techniques that enhance the need for in-depth information to capture data (Punch, 2009). It has the objective to construct an explanation of the correlation between self-efficacy behaviour and performance for remote work and create a theoretical study to reflect those ideas.

Evaluating the employees' experience of remote work will be essential to understanding the necessary changes possible during the management of remote workers. It is expected that the outcome of this study will can make a contribution to organisations wishing to transition employees to working remotely.

The interviews will be conducted with random participants involved in remote work allowing for the investigation of real experiences in the virtual environment and help us to understand those circumstances and how self-efficacy could impact on performance. It was decided that because this research is exploratory it was essential to include a broad range of organisations in the sample to improve the generalizability of the findings and reduce the likelihood of industry-specific performance effects. Maykut and Morehouse (1994, pp.51) explain that the

purpose of choosing random participants "…increases the likelihood that the sample accurately represents the population from which it was selected, allowing for results of the study to be generalized to the larger population" The selection of participants should represent the collection of experience of the phenomenon of remote work.

According to Creswell (2009), qualitative interviews implicates the use of face-to-face or tele-video interviews with six to eight participants, it should involve few open-ended questions that allow the research to probe and extract interviewees' opinion. The primary method of data collection will be performed through semi-structured interviews of remote workers to analyse the perception of self-efficacy and performance. Participants will be invited for online interviews according to their availability and experience in the job. Open-ended questions about personal perception, performance, self-efficacy, remote work skills and knowledge will be used to understand the impact of current management tools on self-efficacy and the potential outcomes to increase performance. For the complete list of questions, see Appendix A.

3.7   Data Analysis Process

Analysis of the data will follow a number of distinct stages as outlined below:

   • The inductive category and coding with comparison will involve an initial coding developed by participant's answers from data collection;

   • Refinement of categories will involve the reorganisation and division of codes in categories and sub-categories;

   • Exploration of relationships and patterns to identify and analyse all emergent themes, and a data reduction rule will be created to discard themes irrelevant to the study;

   • Integration of data will propose the empirical findings in opposition to all the categories.

For this research, all interviews will be performed online, recorded and then transcribed to a virtual document. The information will be coded and divided into categories and sub-categories. The coded data will be reduced and inputted into the software program NVivo to create a matrix analysis.

3.8 Access and Ethical Issues

I have worked remotely for eleven months in an American multinational technology company which has given me an insight into the issues of self-efficacy and performance in a virtual environment as well as the management process in the context of this organisation. I will use my personal experience and contacts with many remote work employees to perform this research. The company has not authorised research into the specific context of this organisation, but they have authorised the interview process with ex-employees.

I have made a formal request for interviews by e-mail, sending the consent forms and a clear language statement (see Appendix B and C). All the individuals who wish to participate in the study have been requested to reply to the email giving their approval to participate in the study. All interviewees will be made aware of the subject of this research.

Since 29th March, 2020, Ireland has been in lockdown due to the Covid-19 Pandemic and because of the government guidelines on social distancing, the interviews will be performed exclusively online. The transcript of the interviews will be sent to all participants if they wish to query anything transcribed or would like to add or delete elements they are free to do so.

The Social Research Association's ethical guidelines will serve as a guide to maintain the integrity and trust of all participants and to be consistent with Griffith College's agreements. All participants have reserved the right to remain anonymous and have their details treated as confidential.

3.9 Conclusion

This chapter has outlined the explanation and rationale behind the chosen research method and philosophy. It detailed the research paradigm, method selection, data analysis, collection of primary data, access, and ethical issues.

The main goal of this qualitative study is to generate an understanding of the remote work phenomenon and the relation between self-efficacy and performance for those employees.

4   Presentation and Discussion of Findings

4.1 Overview

This research aims to study how self-efficacy impacts on performance during remote work and which challenges participants face when working from home or multiple locations. In chapter three the methodology, approach and the reasons for choosing a case study were presented. Primary data was collected using qualitative research and semi-structured interviews with remote workers in Ireland which led to the development of the categorization of emerging themes. This chapter will describe the findings from data collection, linking it to the conceptual framework and research goals. We will examine the perception of remote employees regarding remote work and how management practices could be improved to increase performance.

4.2 Findings

Substantial research has been undertaken on remote work, but less examining the employee's point of view and perceptions. Also, in 2020 the world has seen the emergence of a pandemic caused by the Covid-19 virus, leading to many companies transitioning from location-based work to working remotely. The speed at which the virus spread left little time for businesses to create policy or develop structures to ensure that work would be done at the same level when it was in the office. The data for the study was provided by seven remote workers, currently residing in Ireland, 35% of whom have been working from home for an average of three years, and 65% who prior to the current crisis worked on occasion remotely but are now working remotely regularly. The jobs held by the participants are varied and include consultants, management and operational positions. The areas of work are in the financial, scientific and technological fields. The choice to randomly select participants was to avoid an industry-specific performance effect and an attempt to build a broader view of remote working in Ireland.

The themes that emerged from the interviews were:

1- There is a distinction made between remote work and work from home
2- Personal abilities that enable remote wok are varied amongst the participants
3- Remote work has an impact on the performance of employees
4- Participants have faced challenges when transitioning to remote work
5- Effective communication helps in the transition to work outside of the company

The conceptual framework developed from the literature review supports the presentation of the findings; its structure demonstrates how information and communication work as a link between organisations and employees engaged in remote working. The focus of this research is to develop best practices that could increase self-efficacy for employees and lead to an increase in performance, using different managerial tools.

4.3   Data Gathering and Analysis

The primary data gathering instrument used in this study is semi-structured qualitative interviews. The final list of questions was reviewed by my supervisor and used as guide from which to conduct the interview, leading with probing questions and providing an opportunity to reflect on the interviewees' answers.

The interviews were all performed on-line and recorded for transcription accuracy purposes as described in the Consent Form, and Plain Language Statement. These were circulated in advance to the participants as attachments to the schedule e-mail with a copy of the interview questions in an attempt to prepare participants for the interview (see Appendix D). The interviews had a duration of around half-an-hour. The analysis of the interviews follows a structure with open coding, data categorization and a list of emergent themes.

4.3.1 Categorization

Employees are considered remote workers if they work away from the company's premises and if they are remotely managed. In terms of location, remote workers could be defined as working from home, working while travelling, or working from remote sites, according to this definition, all interviewees have confirmed that they perform remote work.

The interviews revealed that remote workers are distinct from employees who work entirely from home and employees who work partially from home or other locations. The way they perceive remote work and the challenges that arise from this mode of working differ depending on their category. So, the participants were divided into remote work (RW) or work from home (WFH), another distinction of categories is related to how long participants have been working online.

The themes and categorization structure that emerged from the interview are described in more detail in figure 8 below:

Open Coding			
Emergent Themes	**Personal abilities for remote work**	**Impact on Performance**	**Challenges**
Subcategories	• Self-efficacy • I.T. skills • Time management	• Productivity • Interruptions/ Distractions	• Work-Life Balance • Effective Communication • Company support

Figure 11 – Source Data Interviews

The quotes from the research participants is coded according to figure 12

Citing Key for Interviews		
Interview Number	**Years working remotely**	**Work Location**
I1 I2 I3 I4 I5 I6 I7	A – over four years B – two to three years C – up to one year	WFH – Work from home RW – Remote Work from different locations

Figure 12 – Citing Key for Interviews

Example 1: Quote from interview 1, from the participant who has worked from home for two years **I1BWFH**

Example 2: Quote from interview 4, from the participant who works remotely for five years **I4AWRW**

4.4 Self-Efficacy and Personal abilities for remote workers

When questioned about personal abilities that helps during work, participants used terms like discipline, focus, flexibility, I.T. skills and control as critical skills enabling them to work outside the company's office.

Regarding personal abilities and distinctions between job positions, a discussion was had based on the fact that in 2020 all the participants transitioned to working from home due to the COVID pandemic. The ensuing discussion explored to what extent this arrangement would change the structure of modern work, and if companies would create policies to allow employees to continue to work from home after the re-opening of the market.

> *This is going to be part of the interesting thing that comes out of the back of this is that, you know, correct, let's say three months ago, only above a certain level, were allowed to work from home. Obviously not at the*

moment, one hundred percent of working from home is it's going to be an interesting challenge, is that are you going to be able to put that old way of working back in the box? I don't think so... So I don't think the world of work will never be the same again.

<div align="right">

I3BWR

</div>

Self-Efficacy

Participants described their personal experience while working remotely with intrinsic aspects of self-efficacy. The expression "self-efficacy" is a technical term, which participants understood as the correlation between self-efficacy and remote work. Participants said that 'self-control, be accountable to yourself and self-discipline' are predominant characteristics used to control the work environment. The belief they can accomplish a task is essential for success. The lack of supervision from a superior means remote workers need to rely on themselves to perform tasks. It requires a certain amount of autonomy.

> *They (remote workers) need to have greater self-control; they would have to have self-control focused on work and better manage their time.*
>
> <div align="right">

I6ARW

</div>

> *The abilities I suppose you do need to have are self-discipline and control… it is not as if I do a role where my boss knows what I do every day or every week… so being accountable to yourself and to your boss, essentially, that is the main skill.*
>
> <div align="right">

I3BRW

</div>

Self-efficacy, applied to social cognitive theory, is the ability of individuals to shape their reality through behaviours and motivation. Employees that believe they have the necessary tools to achieve and overcome obstacles have a better attitude towards performance and persevere at arduous tasks. Participants were asked if their perceived capacity would influence remote work.

> *You might not necessarily have your usual support, and you are very much all alone. So, you have to have the ability to know that you have everything you need to succeed, and also you have already the skill sets to succeed. Because if you are not confident in terms of that, I think working from home is even more of a challenge.*
>
> <div align="right">

I1BWFH

</div>

The isolation from colleagues, management and/or the team when working from home, enhances the necessity of strong self-efficacy attributes that lead to motivation when performing remote work.

> *To be very honest, it is not for everyone. Not everyone can work from home because it requires a lot of motivation. It is not like you can go anywhere else…. In the office, employees meet other people to discuss about work.*
>
> <div align="right">

I5CWFH

</div>

> *You have to be good at your job mostly because nobody else will do it for you or if you do have to call someone to help you, most of the things that have to be done, you have to know how to do by yourself. So some of the skills I would say basically is know your job.*
>
> <div align="right">I4AWFH</div>

Another requirement to thrive while working remotely is a clear set of targets or goals that encourage the employee to develop self-motivation to accomplish them. Self-efficacy theory says that the individual has the capacity to perform and motivate themselves (Bandura, 1997). One participant noted that strict targets keep him motivated during remote work. I2BWFH stated, "*some of the things we have to do are really tight to deadline, having deadlines pretty much it motivates me to keep working and working steadily*". Another participant proffered the following statement:

> *I can tell what helps to work better is to set some targets because if I just tell myself to get the job done, I am too relaxed… and if my boss gives me a target, which I knew I wanted, but it was too lose for me, and in the end, I will not produce a lot. So some strict targets, some personal targets like that helps a lot.*
>
> <div align="right">I4ARW</div>

Other participants' statements regarding personal abilities and skills for self-efficacy suggest that remote workers should be "*predisposed and prepared to work* remotely" (I6ARW) and how their predisposition to work without supervision does not obstruct work.

> *There are definitely certain tasks that I do better at home. And so what I do know is that if there are things that, you know, if I need to write a report, for example, always try and do that… it is not as somebody is reading by my shoulder, watching me.*
>
> <div align="right">I3BRW</div>

> *I would say it is more difficult to work from home. It requires high level of skill because if you are working in office and you have a bad day, you can just talk to the person sitting next to you.*
>
> <div align="right">I5CWFH</div>

I.T. Skills

Working from home or at multiple locations means that employees may not have company support all the time. If problems with equipment arise, the employee will be responsible for solving them. I.T. skills, then, were mentioned by participants as being essential for remote work.

Some skills I have to have are like computer wise. For example, we have to be good at computers. You have to be good at doing your job mostly because nobody else will take part in it. You could call someone to help you, but most of the things that have to be done, you have to do by yourself. So some of the skills I would say basically is know your job to be sure that you are well trained and computer skills is essential.

<div align="right">I4BRW</div>

IT skills are profoundly impacted by demographic and age. It was discussed with one participant how the gap between generations could impact remote work. If employees are not comfortable using technology, it could be a challenge to work outside the company's premises.

If you had like a workforce that was sixty years old, they had never set up a home office and had never set up a computer. It would be highly challenging to put it together.

<div align="right">I1BRW</div>

I.T. skills are more relevant depending on the size of the company where the participants work. There is a difference between big and small companies regarding I.T. support. Smaller companies may not have an I.T. department to support employees.

Apart from that technical support sometimes, yes. You know, not having an I.T. person right there that you can call up to check or whatever. Question you have about your laptop, etc.. I mean, we have to take care, really. I take care of everything. I.T. issues. I have either myself for reaching out to someone. And again, this maybe has more to do that it is a start-up.

<div align="right">I2BWFH</div>

Time Management

All participants highlighted time management as an essential tool for success in remote work. The lack of routine and procedures that structure the execution of work escalate the need for employees to manage their workload efficiently. They stated that working from home means other distractions could impact on their performance like family members, amenities like television or even a nap during the day. Although there are distractions while working in the office, participants say it would have less impact there because of the proximity to other employees and authority figures.

Working remote requires good time management because many times you are working at home and you have several distractions like television, family and friends, depending on your personality you can surrender to this amenity and forget about work. In the office, this type of situation is more

<div align="center">38</div>

difficult to happen to your job. Because sometimes you work beside your boss or co-workers... I believe the biggest ability is Basically, focus in relation to the distractions and know how to manage well your time.

<div align="right">I6ARW</div>

Time management one is, I think, was my most challenging, my most challenging times, to be honest, so it takes some time to understand what I have to do.

<div align="right">I4ARW</div>

It's hard to say how much it takes certain skills. Like I mentioned before, they have to be good at time management, they are supposed to work without being told what to do or observed to do so. So yeah, I think it takes certain characteristics that they need to possess.

<div align="right">I7BWR</div>

4.5 Impact on performance

Participants were asked if they believed working remotely has an impact on their performance and to evaluate if it would be more significant compared to when they are working on-site. Three participants said their performance is equal or inferior when working from home, and four participants stated that their performance is improved when working remotely.

Productivity

More than half of participants claim the flexibility and freedom to manage time and routine increased productivity when remote working. Another emergent issue is the absence of a start and finishing time while working from home, which can increase productivity but also result in a poor work-life balance for remote workers.

You are expected, or at least I feel like I have to show that flexibility, … and I definitely feel like I am working more hours than I would be or I should be and working during hours when I probably would not be.

<div align="right">I2BWFH</div>

It's just the way I organize myself… I know how long it's going to take and I know what time it's better for me, then I can get a better performance, it is how I do the work and what the final result is.

<div align="right">I4ARW</div>

I5CWFH claimed that productivity was increased because of the isolation while working from home: "*In fact, if I was doing the same job in an office, I wonder if it could help as many customers as I am helping now*"(I5CWFH). Some participants

described their performance as lower or equal to when working remotely, resulting from distractions when they are at home or a difference in workflow and working hours.

> *There is definitely something around your productivity at home… But on the other hand, if I am working in the office, at five, six, I just go and get the bus to go home, so because I am here (at home) probably I work longer. So, I do not think I am less productive, but just that sort of cadence and flow of the day is different when I am home.*
>
> I3BRW

> *I believe I am more productive when I am working in the office because I have less distractions, like friends and family, leisure amenities. In the office, I work more focused on my work. I see a performance improvement when I work at the office.*
>
> I6ARW

I1CRW asserted that an increase in performance would not be possible if the company does not give adequate support with equipment and system applications*: "A systems application and proper equipment like broadband, desk, computers, you know, simple things, but it all contributes to the productivity of working from home".*

Interruptions/Distractions

When questioned about performance, all the interviewees declared that interruptions and distractions play a role while working remotely. Participants who believe their performance is less when working remotely said that interruptions at home impact their productivity.

> *So there is an office here which helps, but maybe there are more distractions, generally more distractions, but overall, if you do not have an office or space just for yourself, it would be a lot more difficult, for example if you have to work in kitchen, and sharing the house with other people, it is not ideal.*
>
> I7BRW

Participants mentioned that having children in the house or living with family members could have an impact on their work due to distractions and/or interruptions.

> *I believe I am more productive when I am working in the office because I have less distractions,*
>
> I6ARW

> *I do have extra distractions here above and beyond, when we started working from home in the office, people were told pretty clearly, this is*

not a replacement for childcare. No, it's not a problem for me. I'm sure if you did have kids who come out from school at three o'clock, it could be a problem.

<div align="right">I3BWR</div>

On the other hand, two participants stated they face fewer interruptions when working from home.

I am not interrupted. So it is kind of I say that it is me and myself only so I can do what I know and what I have to do. So I know how long it is going to take and I know what time it is better for me. So I try to organize in that way that I have a better performance.

<div align="right">I4ARW</div>

Here (at home) I don't take many breaks, So if I was in the office, I would go and talk with colleagues and have more distractions. So working remotely I can dedicate all the time to work. In the office, anyone can just walk up and start a conversation. You know, ask if I want to smoke or a coffee.

<div align="right">I5CWFH</div>

4.6 Challenges while working remotely

The adoption of remote work by companies is not without challenges for employees. Most participants said they enjoyed working remotely and see it as beneficial, especially when given some flexibility and around their tasks. Whether they are satisfied or not with these arrangements, it is important to study remote workers perceptions in order to ascertain if improvements could be made.

Work-Life Balance

The literature review highlighted many studies examining the impact of remote working on work-life balance. The disruption of boundaries between work and home can profoundly impact employee life.

The whole segregation between home and office… once I have gotten a routine going that has helped me sort of focus and discipline, too. So I think that once I got the right balance it has become better. But as you do miss the social element that has been, I think, the biggest challenge, I do miss some sort of socializing.

<div align="right">I1CRW</div>

The flexibility to choose working hours and create a better flow for work is seen as a motivational element of working remotely, leading to improved performance for employees.

<div align="center">41</div>

I like the idea that I can do other things, not only be at home, not be only at work. So I like the idea that I can do that. I am actually more free. I have more freedom to do what I do. So that is what motivates me as well.

<div align="right">I4ARW</div>

I think that, well, I like the work from home, because it gives me back a bit of a balance, like I get to have a bit more sort of life balance and I think that being able to sort of be in your own element, which is being home, allows you to be a bit more focus as less distraction as less people you have to talk to. So that gives me a bit more focus in terms of my work. So I think that sort of what motivates me to work a little bit better in that sense.

<div align="right">I1CRW</div>

For the last three years, I have had young children who were in primary school. So obviously their demands on my time from them are pretty big. So it allows me to balance that, balance my time with them, but also my own leisure, because sometimes my time is flexible. I can do something for myself, you know, for my own leisure or sport in between.

<div align="right">I2BWFH</div>

Participants say that remote work is seen as motivational if employees are given flexibility in working hours. When hours are mandated, it is seen as demotivating because of isolation.

I am lucky because I have a partner. Some people have families. And some people are all alone. So imagine them being alone 24/7 every day. I think it is important that companies realize that the people working from home will need more support, especially in terms of mental well-being, and even is just checking in with each other from time to time.

<div align="right">I1CRW</div>

I believe that remote work is important in crucial times like we are having now in the pandemic, or some situations that you cannot go to the office. But as a permanent situation, I don't believe it is beneficial to all positions. I work as a consultant. I think that sporadically work remotely is good but not as a permanent job.

<div align="right">I6ARW</div>

Communication

The sophistication of advanced technology has increased the number of individuals working from home or at various locations, and effective communication is a key factor to enable remote work. Organisations are responsible for creating informal channels, computer-mediated communication platforms and tools like virtual private networks to enable remote work. The majority of the time technology is the only link between employee and company.

Participants expressed their concerns regarding weak structures, policies or communication with the company they work for and how imperative they are for a remote worker to succeed.

> *The consultant needs to discuss certain types of problems with other consultants, if the problem is complex and if you do not have a person to talk about a program, it ends up impacting your performance and it takes you longer to solve a problem.*
>
> I6ARW
>
> *The whole concept that we are more isolated, we are less connected to each other, that the more the need for organisation to ensure that its platforms to stay connected to be able to communicate effectively.*
>
> I1CRW
>
> *I think that communication with your boss on the other side and with the team or the transactions at work and authorizations will not be successful.*
>
> I4ARW

I3BWR described how communication can be a challenge during remote work, and that it cannot replace face-to-face meetings going on to add that creativity and motivation decrease in a home environment.

> *I suppose there are two challenges. One would be, the technology of the moment is great, but the technology still does not replace that idea of the team conversation (in the same location). The second is actually there is a motivational side, because I am one man working from home, it is always good having some people to bounce ideas, So I think, that maybe the creativity or motivation side suffers when you are working remotely.*
>
> **I3BWR**

Participant I2BWFH mentioned that constant communication during remote work enhances motivation and engagement, making work easier.

> *I'm in constant communication with people, either through email or through zoom or through apps on the phone or conversations, I feel like I'm constantly engaged with people. So that's, I suppose, motivates me and makes my life a lot easier.*
>
> I2BWFH

Company Support

During the interview, participants were asked if they think company support is more important when working from home or various locations than when working at the company's premises. All interviewees said that while working away from the office, they might not have the same support. They believe the organisation is responsible for creating a safe and supportive environment enabling remote work.

I think it is important that companies realize that the people working from home will need more support, especially in terms of mental well-being, even if it is just checking in with each other from time to time. Yes, I think so. I think it's more important when you are working from home because you might not have necessarily your usual support. And you are very pretty much all alone, work from home is even more of a challenge.

I1CRW

The lack of direction and prioritizing risks while performing remote work was mentioned as one factor that companies could improve regarding their support. I2BWFR maintained that if the work was done in the company office, team members and bosses would be more aware of problems with workload.

There are often requests for change of direction politically, so something is a priority. And then very soon after, one week later, we have another priority. It should have more structure and real prioritizing risks. I sometimes think because you are a distance, people do not realize how immersed you are in another project. So, you just think, OK, well, whoever reach out to, they are ready, they are going to work. But, you know, sometimes you really are tied down to another project. I think, if you are in sharing an office, I think people would have more of an awareness of what you are doing and your busy times.

I2BWFR

Two participants affirmed that regular contact and interaction between team members are important. Receiving feedback or the support of colleagues to overcome obstacles is essential.

When I am working on a project, sometimes I wish we could have received an answer more quickly, more guidance more quickly, or had someone right there immediately to bounce something off. So I think it's more the immediacy of working with someone right away. But again, it's just, I suppose, adapting to that. Apart from that technical support, not having an IT person right there that you can just call up to check.

I2BWFR

Have contact with my team and different colleagues who are also remotely or from the home office. I would like to have contact with the team. The most technical problem has to be discussed technically with another consultant. if you have access to these consultants quickly remotely I think I could improve my work. Total support from the team during business hours.

I6ARW

I4ARW mentioned that the development of remote work depends on trust from the company to employees, the company has to trust they will perform the work to the same capacity to justify the flexibility that is given to individuals.

> *Not every company will support to work from home because it is kind of expensive. It takes trust from the work as well because they have trust in you to work those hours that you are scheduled because they are paying you. So they have to trust you are doing work from home. I think there are different types of supports for traditional work and remote work, but sometimes it is needed more supports in remote work.*
>
> I4ARW

Finally, it was asked during the interview if participants enjoyed this mode of work; all of the answers were positive.

> *Yes, I like it very much, it suits my schedule, it suits my lifestyle. And with everything that has happened with Covid-19 and the social distancing and isolation measures, it has been good for us.*
>
> I2BWFH
>
> *I do enjoy because I do not have to go anywhere, there is no cost with transportation. I just have to help people and start talking, so it is a lot of fun. So, yes, I do enjoy this type of work.*
>
> I5CWFH
>
> *I do, I enjoy it, that gives me a bit of freedom and flexibility to do what I need to do and not have to go into the office every day. Especially what we are at the moment, it does not really impact me that we are working from home five days a week. I did not previously work five days a week, I worked one, maybe two days a week. But, working five days or one day does not make much of a difference.*
>
> I3BWR

4.7 Discussion

The data gathered from the qualitative semi-structured underlines the aspects of remote work that impacts on employees through their abilities and the challenges they face when working outside the company's premises. The research objectives were formulated by reviewing the literature on remote work, performance and self-efficacy. The conceptual framework links the literature review, research method and design. Justification for the chosen research methods is presented. The findings from the qualitative data collected as they relate to the research questions follows.

Research Question One: What is the importance of self-efficacy and performance when working remotely?

45

Human resource practices have studied the influence of personality, skills and abilities on work for years. Staw et al, (1986) and Leuty and Hansen, (2012) affirm that personality variables can predict work values, because personality influences how individuals see the world. Social Cognitive theory infers that skills and abilities are moulded through observation and interaction between individual and environment (Bandura, 1989; Staples, Hulland and Higgins, 2006).

Some studies claim that remote workers are characterised by an absence or reduced supervision of their work (Staples, Hulland and Higgins, 2006). This research provides a deep understanding of the variety of mechanisms individuals employ when remote working.

The data from the interviews suggests that specific abilities, skills and knowledge are required to perform remote work. The principal characteristics mentioned by participants are time management, I.T. skills and autonomy.

The literature review is inconclusive at showing if remote work impacts employee productivity; some studies claim that such arrangements could increase job satisfaction and reduce fatigue, leading to an increase in performance (Golden, 2006).

The analysis provides evidential support for the hypothesis that performance is increased when employees have the option to work from home or other locations.

Participants stated that flexible schedules allow for work during hours when they are more productive and that such arrangements are perceived as motivational. Staples, Hulland and Higgins (1999) says that self-efficacy influences remote work performance employees' attitudes towards remote work and organisations. Individuals with high levels of self-efficacy are predisposed to accept arduous tasks, persevere with challenges and work harder on tasks which in turn lead to higher motivation and performance (Bandura, 1997).

However, Hunton (2005) infers that working exclusively from home decreases the productivity of employees. Participants have confirmed that when they are

obliged to work remotely full-time, it can impact negatively on work and potentially decrease their performance.

Research Question Two: What are the challenges remote workers face when performing their job?

The main challenges participants described during remote work relate to the work-life balance, communication and the absence of or reduced support that employees receive in the office.

Hunton (2005) employs self-determination theory to describe the internal motivations for an employee to decide to work remotely. This motivation is guided by autonomy, relatedness and self-efficacy, as well as an attempt to achieve a better work-life balance.

This suggests that organisations using remote workers must enable remote worker performance through the adoption of policies that support them. Furthermore, organisations and remote workers share a collective responsibility for performance.

The participants provided testimony that isolation and lack of social interactions impact their work. The lack of a division between personal and professional life causes issues that can lead to a more intense and stressful work environment, resulting in a poor work-life balance. The attrition created by removing divisions between work and home exposes employees to a role conflict (Elisson, 1999).

One participant said that he prefers to work the same work hours they would work in the office. 85% of participants affirmed that they prefer to have a flexible routine. However, the availability of support and the dearth of awareness from the company can result in working more hours.

Insufficient contact with other team members to discuss work, bounce ideas off or help during creative projects are regarded as some of the disadvantages of remote work. Topi, in his article, Supporting Telework: Obstacles and Solutions

asserts that the isolation from long hours at home while working is a disadvantage compared to the flexibility remote work brings (2004).

The absence of feedback or a structure that helps with prioritisation was mentioned by participants as a challenge when working from home. This corroborates Conger and Kanungo's theory that communicating strategies and visions effectively has a more significant impact on remote employees achieving goals than removing barriers generated by the lack of face-to-face interactions (1998).

Valsecchi (2006) and Hislop et al. (2008) claim that companies using technology to assess employees' performance are not provided with an in-depth analysis of behaviour. Furthermore, participants indicate that calls and online communication are no substitute for face-to-face interactions and that companies should provide opportunities for regular meetings outside the virtual world.

For 30% of participants, who work exclusively from home, having a dedicated workspace is vital for guaranteeing a division between work and offline time, and also results in fewer interruptions.

4.8 Conclusion

The discussion of the findings of this research was linked to the conceptual framework and research questions in this chapter. There is corroboration that remote work has an impact on individuals' lives and work performance.

Regardless of the abundance of available research on remote work, there is a gap in the literature namely, research on employees' perceptions of self-efficacy and performance.

The interviews appear to indicate that the participants have a positive opinion on remote work, but they also referred to some concerns about the challenges companies would face when transitioning the workforce to work remotely or from

home. The main challenges described were the decrease in the work-life balance, insufficient communication and lack of company support.

5   Concluding Thoughts on the Contribution of this Research, its Limitations and Suggestions for Further Research

5.1   Implications of Findings for the Research Questions

The objectives of this research are to discover the personal abilities related to self-efficacy that impact on performance for remote workers and the challenges encountered while working in a non-traditional environment. To represent these objectives and give structure to the research, the following research questions were proposed:

1.   What is the importance of self-efficacy for employees in performing their tasks when working remotely?

2.   What are the challenges remote workers face when performing their job?

This chapter will expand on the findings, based on correlations between the research of the literature review, and the conclusions drawn from the emergent themes.

5.1.1 Self-efficacy and personal abilities for remote work

Individuals who work away from the company's offices typically work with minimal supervision and must trust their own abilities and initiative to perform remote work. Social Cognitive Theory contends that a person learns from interactions between individuals, the environment and behaviours; applying self-efficacy concepts is essential for individuals who require considerable work autonomy. The absence of face-to-face interaction could be used as a good forecaster for performance and behaviour in a non-traditional work environment (Bandura, 1989; Staples, Hulland and Higgins, 2006).

The findings imply that remote workers need to rely on themselves, have a sense of autonomy and be accountable to themselves and the organisation they work for. This research has articulated, from an employee perspective, the factors which have an impact on remote work performance to clarify potential drivers to increase performance.

Felstead (2017) states that remote employees have a more positive attitude in relation to organisations, and work is reported as enjoyable. Kossek and Thompson (2016) affirm that the flexibility of work from home or other locations is used as a motivational tool to increase behaviours that could lead to better performance. These theories have been confirmed in this dissertation with all of the participants stating that flexibility and the opportunity to arrange their work hours is the biggest motivational aspect of remote work. 85% of participants said they enjoy working from home or other locations and 70% said they believe their performance is better when they have the opportunity to work from locations other than than company's office.

5.1.2 Challenges while working remotely

All participants agreed that remote work brings challenges to organisations and employees; they cite issues with work-life balance, interruptions, inefficient communication and lack of company support.

The relationship between remote work and the achievement of a work-life balance is unclear in the literature review, Hunton (2005) uses self-determination theory to describe the internal motivations for an employee to decide to work remotely as a way to achieve a better work-life balance, although, being at home all the time increases friction between family members and could result in stress in an employee's personal life and a reduced perception of personal achievement. Participants have stated that it is hard to maintain a balance between work and life, and the absence of a clear separation could precipitate conflicts in a worker's personal life.

Interruptions during remote work could be classed as either work-related or non-work related disruptions; task performance is decreased when working from home due to interruptions (Hunton, 2005). Even though 70% of participants said their performance is increased while working remotely, participants also affirm that interruptions play a negative role in their productivity. Remote employees do not see work-related interruptions as a problem because it is the only form of

communication with the organisation. However, the absence of an appropriate workstation could amplify those disruptions, and as a consequence affect job satisfaction and performance.

Remote work relies on information and communication technologies to bring work and employees together, participants have said that the sheer necessity of moving employees to work from home and the absence of a policy to ensure services are achieved has created constraints for individuals.

Conger and Kanungo (1998) argue that effectively communicating strategies and visions has a more significant impact on remote employees because of the barriers generated by the lack of face-to-face interactions, individuals that compose a virtual team are electronically connected via lateral relationships and geographically dispersed. The best way to reduce conflicts related to distance is to promote a safe environment for sharing knowledge and communication. (Wiesenfeld,1998; Gibbs and Gibson, 2006).

5.2   Contributions and Limitations of the Research

This research contributes to the analysis of the influence of remote work practices in two ways. First, it explores the personal abilities remote workers believe are necessary to perform their work, with the aim of better understanding the correlations with self-efficacy attributes. Second, there is a need to study the challenges employees face while transitioning to remote work. This study has focussed on remote workers' perception of productivity rather than on organisational performance and has allowed us to capture the distress and concerns from an employee personal view.

This study was based on a cross-industry and cross-occupational perspective, which creates a certain level of generalisation. It was also, based on correlations and not controlled experiments, which makes the validity of causal relationship relatively weak. It was conducted based on the perceptions and self-reports of

remote workers, characteristics which can make the research less accurate and more predisposed to bias tendencies.

The choice of semi-structured interviews as the primary data gathering tool brings some limitations; the participants were not fully aware of some technical concepts used in the interview. The coding process and comparative analysis required some interpretation, and a more accomplished handling of the interview would have required less interpretation.

5.3 Recommendations for Practice

This work provides a foundation for thinking about issues for organisations undertaking remote work as a business strategy in the era of pandemics, and the role of personal abilities and self-efficacy during the evaluation of the performance of remote workers.

This study suggests that there are several challenges that individuals face when transitioning to work from home; it underlines the reasons company support is more critical when working away from the organisation's premises, and it appears that for the successful adoption of remote work organisations must create policies and communication processes.

5.4 Recommendations for Future Research

Although the topic of remote working has been the subject of an extensive amount of research, several topics remain neglected. Future research could include the role of personality in employee's experiences of remote working and personal evaluation of the company's process. Because communication and information technology changes quickly, more research on patterns of information control in the virtual environment are recommended for the development of future studies.

Future research focussing on one-specific industry field and controlled experiments would create a stronger causal relationship. Therefore, an understanding of the challenges of remote working could be evolved through

future work not only by utilising the findings of previous studies but also through addressing some of the points raised here.

5.5 Final Conclusion and Reflections

This study intended to determine the challenges and personal abilities remote workers face while performing their jobs. The study reviewed the literature related to remote work and other relevant subjects in order to understand the organisational practices and process. The primary data was collected with semi-structured interviews with remote workers residing in Ireland.

Several challenges arose throughout the research process. Even if I have gained some experience in working from home for the past year, it was a challenge to undertake academic research and writing on the procedures and processes required for this subject. After determining the most appropriate research approach, my lack of experience in interviews and the coding process reflect on how I have captured the meaningful categories.

This research process has provided an opportunity for me to acquire and increase my knowledge and represents for me the greatest achievement of my life.

References

Abraham, M. (2008). 'Globalisation and the Call Centre Industry'. *International Sociology*, 23(2), pp. 197–210. DOI: 10.1177/0268580907086376.

Alase, A. (2017). 'The Interpretative Phenomenological Analysis (IPA): A Guide to a Good Qualitative Research Approach.' *International Journal of Education & Literacy Studies*. 5(2). pp. 9-19. Available at: https://files.eric.ed.gov/fulltext/EJ1149107.pdf. Accessed 29 November 2019. doi: 10.7575/aiac.ijels.v.5n.2p.9

Austin, J. T., Vancouver, J. B. (1996). Goal Constructs in psychology: Structure, process and content. Phycology Bulletin, 120, 338-375

Allen, *et al.* (2015). 'How Effective Is Telecommuting? Assessing the Status of Our Scientific Findings'. *Psychological Science in the Public Interest*, 16(2), pp. 40–68. DOI: 10.1177/1529100615593273

Bandura. (1983). 'Self-Efficacy of Anticipated Fears and Calamities'. *Journal or Personality and Social Psychology, 45(2), pp. 464-469.*

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), Annals of child development. Vol. 6. Six theories of child development (pp. 1-60). Greenwich, CT: JAI Press.

Bandura, A. and Cervone, D. (1986). 'Differential engagement of self-reactive mechanisms governing motivational effects of goal systems. *Organisation Behaviour and Human Decisions Process.* 38(1). Pp. 92-113

Bandura, A., & Jourden, F.J. 1991. Self-regulatory mechanisms governing the impact of social comparison on complex decision-making. *Journal of Personality and Social Psychology,* 60: 941–951.

Barge, J. (1996). "Leadership Skills and the Dialectics of Leadership in Group Decision Making." In R. Y. Hirokawa and M. S. Poole (eds.), *Communication and Group Decision Making.* (2nd ed.) Thousand Oaks, Calif.: Sage, 1996.

Bailey, D. and Kurland, N. (2002) 'A Review of Telework Research: Findings, New Directions, and Lessons for the Study of Modern Work'. *Journal of Organisational Behavior*, 23(4), pp. 383–400. DOI: 10.1002/job.144.

Belschak, F. and Den Hartog, D. (2010). 'Pro-self, prosocial, and pro-organisational foci of proactive behaviour: differential antecedents and consequences'. Journal of Occupational and Organisational Psychology, 83: 2, pp475–498.

Bloom, N. *et al.* (2013). 'Does Working from Home Work?' *Quarterly Journal of Economics.* pp. 44. DOI: 10.1093/qje/qjue032

Bogdan, R., Biklen, S. (1998). Qualitative research in education: An introduction to theory and methods (3rd ed.). Needham Heights, MA: Allyn & Bacon

Bøgh, A. et al (2016). 'Performance in Public Organisations: Clarifying the Conceptual Space'. *Public Administration Review.* Vol. 76 Issue 6, p852-862. DOI: 10.1111/puar.12578.

Bouas, K. S. & Arrow, H. (1996). The development of group identity in face-to-face and computer-mediated groups with membership change. Computer Supported Cooperative Work, 4, 153–178.

Burgess, J. and Connel, J. (2006). 'Developments in the Call Centre Industry'. Routledge. New York. 1st edition.

Candy, C. (1989). Constructivism and the study of'self-direction in adult learning. Studies in the Education of Adults, 21(2), 95-116. https://doi.org/10.1080/02660830.1989.11730524

Conger, J., and Kanungo, R. *Charismatic Leadership in Organisations.* Thousand Oaks, Calif.: Sage, 1988.

Creswell, J.,W. (2007). Research design. Qualitative and mixed methods approaches. London: Sage.

Davidson, P.L. (2013) 'Why do many firms still miss the competitive advantage of virtual teams?' In Portland International Conference on Management of Engineering & Technology (PICMET). Portland: PICMET, pp. 1697–1708.

DeSanctis and Monge, G., P. (2006). 'Communication Processes for Virtual Organisations'. *Journal of Computed-Mediated Communication,* 3(4).

Dubrin, A. (1991). 'Comparison of the job satisfaction and productivity of telecommuters versus in- house employees: A research note on work in progress'. *Psychological Reports* 68: 1223–1234.

Donaldson, B. (1990). *Sales management: Theory and practice.* London: MacMillan Education Ltd.

Ellison, N.B. (1999) 'Social Impacts: New Perspectives on Telework'. *Social Science Computer Review*, 17(3), pp. 338–356. DOI: 10.1177/089443939901700308.

Eurostat. (2018, 06 20). *Eurostat.* Retrieved from https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20180620-1.

Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technology, Work and Employment, 3*(32), pp.195-211.

Finnis, J. (1980). Natural Law and Natural Rights. Oxford: Clarendon Press.

Fonner, K. and Roloff, M. (2010). "Why Teleworkers are More Satisfied with Their Jobs than are Office-Based Workers: When Less Contact is Beneficial". *Journal of Applied Communication Research.* 38 (4), p336-361. Available at: https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker. Accessed at 5 May 2020

Gibson, C., and Gibbs, J. (2006). 'Unpacking the concept of virtuality: the effects of geographic dispersion, electronic dependence and national diversity on team innovation'. *Administrative Science Quarterly*, 51: 451–95.

Gist, M. (1989). 'The influence of training method on self-efficacy and idea generation among managers'. *Personnel Psychology,* 42: 787–805

Glaser, B. G. and Stauss, A. L. 1967, *The Discovery of Grounded Theory*, Chicago: Aldine

Golden, T. (2006). 'The role of relationships in understanding telecommuter satisfaction'. *Journal of Organisational Behaviour*, 27: 319–40.

Gray, P. (1997) 'A Demand-Side Approach to Telecommuting'. *Information Systems Management*, 14(4), p. 21. DOI: 10.1080/10580539708907071.

Gray, D. (2004). Doing Research in the Real World. Chapter 2. Sage Available at: https://www.sagepub.com/sites/default/files/upm-binaries/58626_Gray__Doing_Research_in_the_Real_World.pdf#page=6

Guba, E., Lincoln, Y. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 3 (pp. 105 – 117).

Hammersley, M. (2003). *Educational Research: Current Issues.* London: Sage Publications.

Handy, C. (1995). "Trust and the Virtual Organisation." *Harvard Business Review. 73*(3), 40–50.

Hermann, D. and Felfe, J. (2014). 'Effects of leadership style, creativity technique and personal initiative on employee creativity'. *British Journal of Management*, 25: 2, 209–227.

Hislop, D., Axtell, C. and Daniels K. (2008). 'The Challenge of Remote Working'. *The Oxford Handbook of Personnel Psychology.* DOI: 10.1093/oxfordhb/9780199234738.003.0024

Hunton, J. (2005). Behavioral Self-Regulation of Telework Locations: Interrupting Interruptions!' *Journal of Information Systems.* 19(2). Pp. 111-140.

Huws, U., Korte, W., & Robinson, S. (1990). *Telework: Towards the elusive office.* Chichester, UK: Wiley.

Illingworth, M. (1994). Virtual managers. *Information Week* (June 13), 42–5

Jarvenpaa, S., and Leidner, D. "Communication and Trust in Virtual Teams." *Organisation Science,* 1999, *10*(6), 791–815.

Johnson, R. and Onwuegbuzie, A. (2004). 'Mixed Methods Research: A Research Paradigm Whose Time Has Come.' Available at: https://journals-sagepub-com.ezproxy.gcd.ie:2443/doi/pdf/10.3102/0013189X033007014

Jung, Chan Su. 2011. Organisational Goal Ambiguity and Performance. *International Public Management Journal* 14(2): 193–217.

Karia, N. and Asaari, M.H.A.H. (2016) 'Innovation Capability: The Impact of Teleworking on Sustainable Competitive Advantage'. *International Journal of Technology, Policy and Management*, 16(2), p. 181. DOI: 10.1504/IJTPM.2016.076318.

Keeves, J. P. (1997). Educational research methodology and measurement. Cambridge: Cambridge University Press.

Kivunja, C., Kuyini, A. (2017). 'Understanding and Applying Research Paradigms in Educational Contexts'. *International Journal of Higher Education.* 6(5). pp. 26-41. https://doi.org/10.5430/ijhe.v6n5p26

Kossek, E. and Thompson, R. (2016). 'Workplace Flexibility: Integrating Employer and Employee Perspectives to Close the Research–Practice Implementation Gap'. *The Oxford Handbook of Work and Family.* DOI: 10.1093/oxfordhb/9780199337538.013.19

Kowalski, K.B. and Swanson, J.A. (2005) 'Critical Success Factors in Developing Teleworking Programs'. *Benchmarking: An International Journal.* DOI: 10.1108/14635770510600357.

Kuhn, T. (2017). 'The structure of scientific revolutions'. International Journal of Higher Education Vol. 6, No. 5; 2017. http://ijhe.sciedupress.com

Leedy, D., Ormond, E. (2016). *Practice research: Planning and delivering* (11th ed.). London: Pearson

Lindsley, D., Brass, D., & Thomas, J. (1995). 'Efficacy-performance spirals: A multilevel perspective'. *Academy of Management Review*, 20: 645–678.

Leuty, M., & Hansen, J. (2011). 'Evidence of construct validity for work values.' *Journal of Vocational Behavior*, 79, pp. 379–390. doi:10.1016/j.jvb.2011.04.008

Lockee, A and Latham, P. (1994). Goal setting Theory. Motivation: Theory and Rresearch (1:13). Hillsdale, NJ: Lawrence.

Manen, M. (1990). Researching lived experience: Human science for an action sensitive pedagogy. Albany State University of New York Press.

Maxwell, J. A. (2005). Qualitative research design: An interactive approach (2nd ed.). Thousand Oaks, CA: Sage.

McCormick, M. (2001). Self-Efficacy and Leadership Effectiveness: Applying Social Cognitive Theory to Leadership. The Journal of Leadership Studies. 8:1. Pp.22-33.

McLennan, K. J. and McLennan, Ken J. (2007) *The Virtual World of Work: How to Gain Competitive Advantage Through the Virtual Workplace*. Charlotte, NC: Information Age Publishing.

Messenger, J. C. (2017). 'Working anytime, anywhere: The Evolution of Telework and Its Effects on The World of Work'. *IUSLabor , 3*(1699-2938), pp. 301-312.

Messenger, J., & Gschwind, L. (2016). 'Three Generations of Telework: New ICT and the (R)Evolution From Home Office to Virtual Office'. *New Technology, Work and Employment, 31*(3), pp. 195–208.

Mowshowitz, A. (1994). Virtual organisations: A vision of management in the information age. *The Information Society*, 10(4), 267–288

Nabi, R. (2008) "Exploring the Limits of Social Cognitive Theory: Why Negatively Reinforced Behaviors on TV May Be Modelled Anyway" https://doi.org/10.1111/j.1460-2466.2008.00392.x

Neirotti, P. 2012 'Telework Configurations and Labour Productivity: Some Stylized Facts. *International Journal of Engineering Business Management,* (4)7, pp. 1-9. DOI: 10.5772/51641.

Nilles, J., et al (1976). *The telecommunications-transportation tradeoff: Options for tomorrow*. New York: John Wiley.

Nilles, J. (1994), *Making Telecommuting Happen: A Guide for Telemanagers and Telecommuters.* (New York: Van Nostrand Reinhold).

Pancucci, D. (1995). 'Remote Control.' *Management Today.* Pp.78-80

Pinsonneault, A. and Boisvert, M. (2001) 'The Impacts of Telecommuting on Organisations and Individuals: A Review of the Literature'. *Telecommuting and Virtual Offices: Issues and Opportunities*, pp. 163–185. DOI: 10.4018/978-1-878289-79-7.ch010.

Polkinghorne, D. E. (1988). Narrative knowing and the human sciences. Albany, NY. State University of New York. Press.

Pradhan, R. (2016). 'Employee Performance at Workplace: Conceptual Model and Empirical Validation'. *Business Perspectives and Research*, vol. 5, 1: pp. 69-85. https://doi-org.ezproxy.gcd.ie:2443/10.1177/2278533716671630

Powers, T. (1991). Commentary on Bandura's "human agency" *American Psychologist.* 46:1 pp. 151-153.

Punch, F. K. (2009). Introduction to research methods in education. London: Sage.

Rajiv, S., et al (2019). 'How does strategic Alignment Affect Firm Performance? The Roles of Information Technology Investment and Environmental Uncertainty. *MIS Quarterly*. Vol. 43 Issue 2, p453-474.

Ren, Y. (2018). 'Learning in Virtual Teams'. *The Oxford Handbook of Group and Organisational Learning.* DOI: 10.1093/oxfordhb/9780190263362.013.36

Rosengren, C. (2020). 'Performing work: The drama of everyday working life'. *Centre for Work, Technology and Social Change*, Lund University, Lund, Sweden

Saks, A.M. 1995. Longitudinal field investigation of the moderating and mediating effects of self-efficacy on the relationship between training and newcomer adjustment. *Journal of Applied Psychology,* 80: 211–225.

Sarbu, M. (2015) 'Determinants of Work-at-Home Arrangements for German Employees'. *LABOUR: Review of Labour Economics & Industrial Relations*, 29(4), pp. 444–469. DOI: 10.1111/labr.12061

Sardeshmukh, *et al.* (2012), 'Impact of Telework on Exhaustion and Job Engagement: A Job Demands and Job Resources Model', *New Technology, Work and Employment* 27, 3, pp.193–20

Saunders, M.N.K., Lewis, P. and Thornhill, A. (2016) *Research Methods for Business Students*.

Schwandt, T. (1997). Qualitative Inquiry: A dictionary of terms. Thousand Oaks,CA: Sage.

Scott. D. and Usher, R. (2004). Researching education: Data, methods, and theory in educational enquiry. New York: Continuum.

Seibert, S., Kraimer, M. and Crant, J. (2001). 'What do proactive people do? A longitudinal model linking proactive personality and career success'. *Personnel Psychology*, 54: 4, 845–874.

Shea, C. and Howell, J. (2000) 'Efficacy-Performance Spirals: An Empirical Test' Journal of Management. 26 (4) pp. 791-812

Slavin, R. E. (1984). Research methods in education: A practical guide. Englewood Cliffs, NJ: Prentice-Hall

Stanton, W. J., & Buskirk, R. H.(1987). *Management of the sales force* . Homewood, Illinois: Irwi

Stake. R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Staples, et al. (1999). A Self-Efficacy Theory Explanation for the Management of Remote Workers in Virtual Organisations. *Organisation Science., 10*(6), pp. 758-776.

Staw, B. M., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. Administrative Science Quarterly, 31, 56–77.

Sungjun, H. (2018). 'An empirical study on the relationship between perceived employability and employee performance'. *Human Resource Development International.* 21 (2), p74-90.

Taskin, L. and Edwards, P. (2007) 'The possibilities and limits of telework in a bureaucratic environment: lessons from the public sector'. New Technology, Work and Employment.

Tesch, R. (1990). Qualitative Research: Analysis Types and Software Tools. Psychology Press.

Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237-246.

Tomaskovic-Devey, D. and Risman, B. (1993) 'Telecommuting Innovation and Organisation: A Contingency Theory of Labor Process Change'. *Social Science Quarterly.* 74(2), pp. 367–385.

Topi, H. (2004). Supporting Telework: Obstacles and Solutions. *Information Systems Management, 21*(3), pp. 79-85.

Trede, F., & Higgs, J. (2009). Framing research questions and writing philosophically: The role of framing research questions. In J. Higgs, D. Horsfall, & S. Grace (Ed.). Writing qualitative research question on practice (pp. 13-25). Rotterdam: Sense.

Vancouver, J. and Thompson, C. (2001). The Changing Signs in the Relationship among Self-Efficacy, Personal Goals and Performance. *Journal of Applied Psychology.* 86(4). 605-620.

Verboncu, I. & Zalman, M. (2005). Management şi performanţe, Editura Universitară/

Yin, R.K. 2009. *Case study Research design and methods.* 4th ed. London: Sage.

Welz, C. and Wolf, F. (2010) 'Telework in the European Union'. p. 28.

Wiesenfeld, B (1998). 'Communication patterns as determinants of organisational identification in a virtual organisation'. *Journal of Computer-Mediated Communication*, *3*(4). [Online]. Available at: http://www.ascusc.org/jcmc/vol3/issue4/wiesenfeld.html

Willan, M. (2016). 'Research Approaches for Higher Education Students: A Personal Experience' https://files.eric.ed.gov/fulltext/ED568125.pdf

Woolfolk, A., Hoy, W. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology,* 82, 81−91.

Wright, A. (2015). 'Why Some Companies are Moving Away from Telework?.' *Society for Human Resource Management, p*p

Appendices

Appendix A – Interview Guide

Definition: Self-efficacy
Self-efficacy judgments work as a determinant to how individuals behave; it refers to self-belief in the ability a person has to succeed in a task, their confidence to achieve goals and overcome obstacles.

<u>Questions</u>

1) Could you please introduce yourself and describe your work briefly?
2) How long have you worked remotely? Do you enjoy this type of work?
3) Do you work from multiple locations?
4) What motivates you in a virtual work environment?
5) What personal abilities does remote workers needs to succeed?
6) Do you believe remote workers require a higher level of skills than traditional workers? Why?
7) What challenges have you faced while working remotely?
8) What are the impacts of working remotely have had on your performance?
9) Do you evaluate your performance as higher or lower than when working locally? Why?
10) Do you think organisational support is more critical in traditional or remote work? Why?
11) If there were no restrictions of any kind (E.g. budget or procedures), what do you think that would help you to work better remotely?
12) Is there any other information or questions you think that I should have asked that allows you to describe your situation more completely?

Appendix B – Consent to take part in research

I... voluntarily agree to participate in this research study.

I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.

I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.

I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.

I understand that participation involves answer questions and discuss remote work with researcher.

I understand that I will not benefit directly from participating in this research.

I agree to my interview being audio-recorded.

I understand that all information I provide for this study will be treated confidentially.

I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.

 I understand that disguised extracts from my interview may be quoted in Research dissertation presented at Griffith College Dublin.

I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.

I understand that signed consent forms and original audio recordings will be retained in Griffith College Dublin until end of June 2020 or until the exam board confirms the results of the dissertation.

I understand that a transcript of my interview in which all identifying information has been removed will be retained for two years from the date of the exam board.

I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above.

I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Dissertation Researcher: Monica Araujo Marques

Dissertation Supervisor: Garrett Ryan

Signature of research participant

Signature of participant   Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study

Signature of researcher   Date

Appendix *C – Plain Language Statement*

I.   Introduction to the Research Study

This dissertation has as title: An exploratory Case Study of the influences Personal Abilities and Self-Efficacy Have on Performance for Remote Workers submitted for the **degree of: MSc in** International Business Management, it is the result of Monica Araujo Marques investigation.

II.   Details of what involvement in the Research Study will require

It requires your involvement in interviews that should take around 30 minutes of duration.

III. Potential risks to participants from involvement in the Research Study (if greater than that encountered in everyday life)

It does not address any potential risk for participants involved in this study.

IV. Benefits (direct or indirect) to participants from involvement in the Research Study

It does not provide any direct or indirect benefit to participants.

V.   Advice as to arrangements to be made to protect confidentiality of data, including that confidentiality of information provided is subject to legal limitations

The research will be conducted guided by the Social Research Association's ethical guidelines and will maintain the integrity and trust of all participants and consistent with Griffith College's agreements. All participants have reserved the right to be anonymous and have their details treated as confidential.

VI. Advice as to whether or not data is to be destroyed after a minimum period

The data from interviews will be destroyed after the researcher has received the grades from Griffith
College, it is expected to have data destroyed after July 2020.

VII. Statement that involvement in the Research Study is voluntary

Participants are allowed to withdraw from the Research Study at any point.

VIII.Any other relevant information

The sample for this dissertation is small, what could have implications for privacy/anonymity. All the names and references were codified to prevent it.

If participants have concerns about this study and wish to contact an independent person.
Please contact:

Dr Garrett Ryan,

Griffith College Research Ethics Committee

South Circular Road, Dublin 8, Ireland

Mail: garrett.ryan@griffith.ie
Tel: +353 1 4163324

Appendix D – Schedule e-mail

Dear Participant,

Thank you for agreeing to take part in the interview relating to my dissertation.

Please see attached documents for further information.

Attachments:
•Plain Language
•Consent Form
•Questionnaire

Please read it carefully and give your consent to take part by replying to this email.

Kind regards,

Monica